A FITNESS MODEL FOR PASTORS

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By

Kevin Lynn Elders

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A FITNESS MODEL FOR PASTORS

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ABSTRACT

A FITNESS MODEL FOR PASTORS

Kevin L. Elders
Liberty Theological Seminary, 2010
Mentor: Dr. Charlie Davidson

Pastors struggle with weight and fitness to a greater extent than the average person. The results are a lack of credibility, a decrease in ability, and a shorter life span, all of which reduce service to God. This project will serve as a fitness model for pastors to improve health, fitness, and effectiveness in the ministry of the Gospel of Jesus Christ by giving simple diet, lifestyle, and exercise instructions and changes.

Abstract length: 72 words.
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CHAPTER ONE

INTRODUCTION

The Basis for the Choice of Topic

The author of this project started working out with weights on a small scale when he was in sixth grade. For Christmas that year, he received a multi-function weight bench and a 110-pound weight set. The new gym equipment provided some initial hours of fun, but it soon sat unused in his bedroom. One of the smallest kids in every grade until the middle of his junior year, he finally started growing at age sixteen. A renewed interest in his forgotten gym equipment accompanied his growth spurt. After high school graduation in 1991, he joined a fitness gym and has been a committed weightlifter ever since.

One of four sons of a Southern Baptist pastor, the author saw his father begin suffering from heart problems by his mid-thirties. Doctors said stress was a major contributor, but so were his lack of exercise and poor food choices, both of which were results of his frantic schedule. He always served single-staff churches, and therefore, he was the go-to person and fall guy for everything.

His heart problems continued into the 1990’s, and he received his first of ten stents by the age of forty-four. A stent is a metal tube that is placed in a clogged artery to hold the artery open
and improve blood flow to the heart muscle. Stents relieve symptoms like chest pain and also prevent heart attacks.\textsuperscript{1}

The author determined long before he answered God’s call to ministry that his health and fitness would be a priority. He would make fitness a lifestyle, he would not purposefully do anything that would jeopardize his health, and he would not allow job demands to cripple his fitness routine or family life. Hopefully, by honoring God in these ways, his health would be much different than his father’s.

The author has always lifted weights for fitness, not size or strength, but with some natural muscularity and nineteen years of strength training, it is apparent that he lifts weights. Through the years, he regularly has been asked for strength training advice and help. Never considering himself a fitness authority and having no fitness certification, he was reluctant to do so. Even so, pastors, friends, softball teammates, teenagers in his student ministry, and even a few girls kept seeking his advice. He put a workout together for his sister-in-law, a student at Clemson University. While working out with a personal trainer there, she was told, “Whoever gave you this workout knew what he was doing.” That remark increased his confidence and interest in offering help.

Learning strength training “on the fly” is a bad idea. Beginners must learn to exercise properly. Performing exercises wrong can be worse than not doing them at all.\textsuperscript{2} The worst way for a beginner to learn is to walk into a gym and watch other people lift. Some people know what they are doing, others do not, and a beginner cannot tell the difference. It is better to learn the basics (procedure, order, intensity, recovery time, etc.) from someone with experience than

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\begin{itemize}
\item \textsuperscript{1} American Heart Association, “Stent Procedure,” \texttt{http://www.americanheart.org/presenter.jhtml?identifier=4721} (accessed January 25, 2010).
\item \textsuperscript{2} Mayo Clinic, “Weight Training: Do’s and Don’ts of Proper Technique,” \texttt{http://www.mayoclinic.com/health/weight-training/SM00028} (accessed November 14, 2009).
\end{itemize}
from personal experience. The author learned this lesson the hard way in his early days, and suffered through several minor but long-term shoulder, wrist, and knee injuries. Until the injuries healed, his workouts were effectively ended or drastically limited. Every injury, including some of a more personal nature, was due to bad advice and inexperience, and each one could have been avoided with better instruction.

After several years in Liberty’s Doctor of Ministry program without discovering an acceptable project topic, the author finally found an area of need in ministry for which he has enthusiasm, knowledge, years of experience, and a desire to help. Pastors need help with health and fitness. They have stressful lives, busy schedules, and expectations that often border on ridiculous or impossible. This project is a program to teach pastors how to begin a lifestyle of fitness, regardless of their current physical condition.

Statement of the Problem

Health care reform has been at the forefront of the current Presidential administration, but Americans’ health could benefit from something far greater and cheaper than government policy: personal responsibility. Sadly, a large part of Americans’ health problems are directly related to a lack of physical fitness. To put it another way, Americans’ health problems are largely the result of laziness. Gluttony is another major contributor. Scripture condemns laziness, gluttony, and other forms of irresponsible behavior that work against godly character, health, and well-being.3

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3 Ron Kardashhan, Getting in Shape God’s Way (Lake Mary, FL: Siloam, 2009), 184.
Americans are more unfit and overweight than ever before, nutritionally related diseases are at an all-time high, and the trend is toward worse health, not better.\(^4\) Deaths caused by poor diet and sedentary lifestyles rose by thirty-three percent from 1990 to 2000,\(^5\) and America’s track record gives no reason to believe the 2010 census results will show an improvement. A crisis state has been reached. The percentage of overweight or obese Americans has grown from 46 percent in 1983,\(^6\) to nearly 65 percent (more than 120 million people).\(^7\) People are considered overweight if their body mass index (BMI) is between 25-29.9, and obese if their BMI is above 30.\(^8\) BMI is a tool for measuring a person’s body composition by relating bodyweight to height (weight in kilograms divided by height in meters squared).\(^9\) Because it makes generalizations, BMI is not an exact science. For instance, the author is 5’10” and 205 pounds with 12 percent body fat, a 34 inch waist, and a muscular build. An online BMI calculator indicates that his BMI is 29.4, which is considered just shy of obese. Nevertheless, BMI is a good starting point for the average person to discover his acceptable weight range.

Tommy Thompson, U.S. Secretary of Health and Human Services from 2001-2005, stated during his term, “Our poor eating habits and lack of activity are literally killing us, and


they’re killing us at record levels.”

Approximately three hundred thousand deaths are attributed to obesity annually. Being overweight or obese causes a variety of health problems. It increases the risk of Type II diabetes, heart disease, stroke, cancer, sleep apnea, gallbladder disease, osteoarthritis, and fatty liver disease. Forty-one million Americans are estimated to have pre-diabetes.

How did the most blessed, affluent nation in the world develop such a bleak and sickly health profile? America’s health crisis is largely self-created. For instance, heart disease is the leading cause of death in America, and physically inactive people are twice as likely to suffer heart disease as physically active people. But, even with those alarming facts, almost 80 percent of Americans fail to meet the basic physical activity recommendations of thirty minutes of physical activity, four to five times per week. Physical therapist and personal trainer Tom P. Hafer says, “Like most people of affluent societies, we have the luxury of never being malnourished. Yet . . . we have the pain of weight problems or poor health as a result of inappropriate diet and lack of exercise.” America produces enough food to give every American 3,800 calories per day, while the USDA recommendation is between 2,000 and 2,500 calories per day.

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11 Carole Lewis and Marcus Brotherton, First Place 4 Health: Discover A New Way to Healthy Living (Ventura, CA: Regal, 2008), 168.

12 Stephen Arterburn and Linda Mintle, ix.

13 Carole Lewis, 168.

14 President’s Council On Physical Fitness and Sports.

15 Ibid.

16 Gregory Jantz and Ann McMurray, The Body God Designed (Lake Mary, FL: Siloam, 2007), 139.

17 Tom P. Hafer, Faith and Fitness: Diet and Exercise For A Better World (Minneapolis, MN: Augsburg Fortress, 2007), 15.
calories per day. We spend billions of dollars every year on diets, with the total increasing yearly, but our obesity rate continues to rise every year.\textsuperscript{18}

We are a nation blessed with resources and minds that have used those resources to advance technology beyond anything previous generations could have ever imagined. As the author’s family drove to the Southern Baptist Convention’s annual conference every summer in the 1980’s, he and his brothers entertained themselves over the miles with baseball cards, coloring books, Uno, and The Family Circus, while dreaming of a way to hook up their Atari or Nintendo Entertainment System in the car. Now, children can travel with satellite television, movies, laptops, and small, handheld video game systems.

While our technological advances have made life easier and more fun, they have also made us lazy. Before modern technology, everything involved with survival required movement. Building shelter, traveling, growing food, and hunting for the next meal required physical action. United States Olympic Wrestling Team physician Ben Lerner says, “In the beginning, God created man and woman to move. He gave them joints that bend, hands that grab, arms that swing, legs that run, feet that kick, and muscles that stretch, pull, and bench press . . . and He saw that this was good.”\textsuperscript{19} Going to a gym to do weird movements and strength exercises was unheard of and unnecessary. Regular, daily activities worked the body sufficiently.

Until around 1850, 90 percent of the world’s population worked in agriculture or did some type of physical labor to earn a living.\textsuperscript{20} We have a great illustration of the health benefits

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\textsuperscript{18} Ibid., 52-53.
\textsuperscript{19} Ben Lerner, 147.
\end{center}
of life before modern technology in the Amish culture. *Medicine and Science in Sports and Exercise* did a pedometer study and found that Amish men walk an average of 18,425 steps each day, and Amish women average 14,196 steps. Comparatively, the average American walks about 5,000 steps daily. That difference alone results in four to six hundred more burned calories each day by the Amish. As would be expected, the Amish do not struggle with weight, generally speaking, and have only a 4 percent obesity rate, even though their normal diet includes meat, eggs, gravy, potatoes, bread, and plenty of pies and cakes.21

In modern America, just about everything involved with survival can be done with just the movement of a finger on a computer mouse. Purchasing a home, making travel arrangements, shopping for clothes, and ordering lunch can happen without leaving the desk.22 People have found ways to minimize movement, work, and exercise. They love remote controls and even use them for car stereos. Drive-through service windows have long been found at restaurants and banks, but they now exist at pharmacies, video rental stores, dry cleaners, the post office, liquor stores, and even grocery stores. Time cannot be the overriding factor for driving through instead of walking in, because at least some of the time, walking in is quicker. A regular sight at fast food restaurants is a line of cars in the drive through wrapped around the building, while the parking lot (and therefore the inside of the restaurant) is empty. Convenience, better known as laziness in many cases, rules. The physical activity that modern advances have replaced has not been provided for through other measures. Life getting easier and less physical has not been a good thing for Americans or for their health.

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21 Ibid., 153-4.

22 Ibid.
Some statistics show that 60 percent of Americans are sedentary.\textsuperscript{23} Webster defines sedentary as, “marked by much sitting.”\textsuperscript{24} While many people make a conscious decision to do as little physically as possible, having a life marked by much sitting is not a popular goal. Most people are not trying to sabotage their health and fitness. A sedentary lifestyle can inadvertently develop through countless small, daily decisions. The resulting lack of physical activity commonly brings guilt, not indifference or joy. The most popular New Year’s Resolution year after year is to lose weight and/or to get in better shape.\textsuperscript{25} As a member of seven different fitness clubs over the past nineteen years, the author has seen the reality of this number one New Year’s Resolution. During the first four to six weeks of every year, fitness clubs attendance is several times larger than the rest of the year, but by the middle of February, attendance gets back to normal. Americans want to improve their health and fitness, and many make an attempt, but most of these attempts fail and fail quickly.

To be fair, health problems stemming from excess weight and a lack of physical activity are not isolated to America. Every nation that has experienced the blessings of modern technology and greater prosperity struggles with the same health problems as America. An October 2009 report from the World Health Organization (WHO) stated that more people worldwide die from being overweight and obese than from being underweight. That is not to say that hunger is no longer a problem, but the WHO reports that there are approximately 1.6 billion overweight or obese people in the world, and at least 2.5 million deaths are directly attributable

\textsuperscript{23} Branda Polk, “Perfection is Impossible, So Strive For Progress,” Lifeway Magazines and Devotionals, \url{http://www.lifeway.com/article/?id=151421} (accessed August 30, 2009).


to these conditions every year. The same report states that other nations hold America at least partially responsible for the world’s health and weight problems because of its fast food diet, which Americans have globalized for prosperity’s sake. The world watches America and learns, but this lesson is deadly.

Since American pastors live and minister in this American health crisis, it should come as no surprise that their health and fitness mirrors that of the average American. Some studies have shown even worse health statistics for pastors. The Evangelical Lutheran Church in America’s director of ministerial health and wellness, Dr. Gwen W. Halaas, found that its ministers were more overweight than the average American, and more stressed, depressed, and less physically active. Dr. Halaas found that these ministers also had higher cholesterol, higher blood pressure, and more cases of cancer.

Living with the health problems that result from poor fitness, pastors are less likely to survive the rigors of the modern pastoral lifestyle for an entire career. Convincing pastors of these dangers is challenging. They often ignore the warning signs of their failing health and excuse themselves from making changes by filling their time with more “spiritual” concerns.

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27 Ibid., 99-100.
29 “Churches stressing health and fitness.”
30 Carole Lewis,, Marcus Brotherton, 27.
Pastors tend to think less of their physical body than any other part of their being, and they are less interested in health and fitness than the general population.\textsuperscript{31}

The more sedentary a person is, the more likely that person is to be overweight.\textsuperscript{32} Pastoring is sedentary. Pastors spend the majority of their time sitting at their desks, steering wheels, counseling tables, meal tables, and meeting tables. Some days, the most movement a pastor gets is from one sitting session to another. They do not burn hundreds of calories per day doing physically active tasks, so it is easy for them to gain weight and become unfit and unhealthy. To worsen the sedentary nature of the pastoral lifestyle, the typical church culture adds to the difficulties. Many regular functions revolve around food, and the pastor is invited to just about everything. Some pastors attend functions simply to keep from offending, and then they eat, whether or not they are hungry. Year after year of this lifestyle damages the body.

The pastoral lifestyle is also stressful. The schedule is busy and erratic. Meals are often eaten on the go, with little time for concern about what is being eaten. Distress calls come late at night and early in the morning. Regular family outings and even vacations are interrupted by “important church emergencies.” The author remembers one particular vacation to Murfreesboro, Tennessee to visit relatives and to explore nearby Nashville. Two days into the week-long trip, his father was called home to do the funeral of a brother of a church member and did not return until the day before the end of the trip. The rest of the family stayed behind in Murfreesboro, disappointed and unable to explore. The author’s father had pressure from his family and pressure from his church, which turned his vacation into a time of stress.

\textsuperscript{31} Gary L. Scheer, “Three Keys to Pastoring a Healthy Church” (D.Min Diss, Fuller Theological Seminary, 1999), 22. 

\textsuperscript{32} Stephen Arterburn and Linda Mintle, 118.
For many pastors, the modern technology considered to make life easier actually keeps them constantly connected to their jobs with little time for family, reflection, or personal enjoyment. Life is not supposed to be lived this way, but email, cell phones, Twitter, iPhones and Blackberries have spun their web, and many pastors are helplessly stuck - worn out and burned out. This over-connection ultimately adds to the stress. Constant contact with staff and congregation is so available that it becomes an expectation, even though an unrealistic one.

The schedule and stress of the pastoral life does not bode well for exercise time, but most people find time to do the things they enjoy and the things they consider essential. Exercise is not generally considered enjoyable, but it can be. Exercise is not generally considered essential, but it must be. One way to make exercise more enjoyable is to focus on its benefits, which will be discussed in Chapter Two: Fitness Facts: Understanding Fitness.

Pastors no longer receive the respect they once did. Today, every perceived Christian failure is front page news, and the failures of some prominent Christian leaders over the last few decades have made pastors the butt of more jokes than ever before. Pastors may be as vilified and disrespected now as they were formerly trusted and respected, creating additional stress that may have never been considered as part of the job.

There are obvious reasons why so many pastors struggle with fitness and health, but obviously unfit and unhealthy pastors give the impression of undisciplined personal lives. Regardless of the validity of that impression, it can cause serious conflict when unfit pastors teach about such basics of Christianity as commitment, sacrifice, and surrender, or about overcoming other sinful behaviors like sexual immorality, alcohol, drugs, and gambling. Pastors must get a better understanding of the powerful example of their actions and practices.

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34 G. Lloyd Rediger, 29.
must realize that their bodies are walking billboards that advertise for God, and that if their bodies are grossly out of shape, their advertisement for God will be, too. Professional nutrition and exercise coach Joseph Christiano addresses pastor example by stating, “General disregard for caring for the ‘temple’ of God has hurt the witness of the church by not demonstrating a life of self-control and discipline.”

Scripture holds those who teach to a higher standard. James 3:1 cautions, “Dear Brothers and sisters, not many of you should become teachers in the church, for we who teach will be judged more strictly.” How can a pastor teach others to live the Christian life, which is marked by sacrifice, surrender, and discipline, while showing an obvious lack of those traits in physical health and appearance? Knowing right from wrong and willfully doing wrong carries a greater penalty than sinning in ignorance, and James teaches that this is all the more true for pastors.

Pastors cannot speak boldly against a lack of self-control in certain things while having a glaring lack of self-control with something else themselves. Such pastors are seen as hypocrites and they lose credibility. Sinning does not make a person a hypocrite, but minimizing personal sin while highlighting others’ sin does. Sermons on the evils of sex outside of marriage, alcohol, drugs, and other vices are common, but congregations seldom or never hear what the Bible has to say about gluttony and laziness. Proverbs 23:20-21 says, “Do not carouse with drunkards or feast with gluttons, for they are on their way to poverty, and too much sleep clothes them in rags.” Ecclesiastes 10:15 and 18 say, “Fools are so exhausted by a little work that they have no strength for even the simplest tasks . . . Laziness lets the roof leak, and soon the rafters begin to rot.” Pastor Jack Graham of Prestonwood Baptist Church in Plano, Texas writes, “There is really no way to separate the physical and spiritual components of our human makeup because they are so

intricately related. Whoever thinks being spiritual allows us to ignore the physical hasn’t read God’s Word very carefully.”

Even some of the most loved and best known Christian speakers have never resolved their own food issues, so they do not address the topic. Dr. Howard Hendricks of Dallas Theological Seminary used to tell his students, “Overeating is the one acceptable sin in evangelical Christian circles.” Pastoral bravado is not common when it comes to laziness, but it is when it comes to size and appetite. What gives? Overweight pastors “would be fired if they entered the pulpit drunk, drugged, or holding a pornographic magazine, but they are excused from taking an extra two hundred pounds up onto the platform.” The author does not see this reality as a source of humor or criticism. He is aware that not every pastor who struggles with weight and health is lazy and gluttonous, and as previously stated, his desire to help pastors in an area where he has been successful was a motivating factor in choosing this topic.

Leading others into a closer relationship with Jesus Christ is a daunting task, and managing the stresses of leading a church family can be overwhelming even for a healthy pastor. But, to attempt to lead while overweight and/or unfit regularly proves to be unbearable. Carrying too much weight means decreased energy, increased stress, and often, a sense of personal failure and inadequacy that usually come from being overweight and unfit.

This project will address the problem of the current health and fitness profile of American pastors, a profile which is further supported by the results of the author’s survey of pastors from all across the country. The author will present a strength training-based fitness program that

37 Ibid., 55.
38 Stephen Arterburn and Linda Mintle, 2-3.
39 Ron Williams, 51.
involves non-drastic lifestyle and dietary changes and which can be followed by anyone, regardless of current fitness level. Pastors will learn how to make real, measurable, and sustainable improvements to their health, fitness, and appearance in as little as an hour per week. The author’s goal is that this dissertation will provide a tool for pastors to achieve better health and fitness, which in turn will lead to both a better quality of life and a more productive life. A better quality of life will make pastoring more enjoyable and endurable, and a more productive life means more fruit.

Throughout this project, different terms may refer to the same thing. Fitness and physical fitness refer to “good health or physical condition, especially as the result of exercise and proper nutrition.”[40] Weight training, weight lifting, strength training, lifting, and exercise all refer to bodybuilding-type exercises like the bench press, and they may be used interchangeably. Cardio refers to cardiovascular training and refers to endurance exercises like jogging and swimming. Cardio may be used interchangeably with aerobics. Scientific and common names for muscles may be used interchangeably. Unless otherwise noted, all Scripture references will be from the New Living Translation (NLT).

**Statement of Limitations**

This program is not a diet or a quick fix to fitness, because there is none. Fitness cannot be bought, sold, or marketed. Fitness must be owned and developed as a lifestyle. When that happens, fitness is hard to stop. Dietary recommendations will be made, but dieting alone will never bring health and fitness. Food restriction dieting is a passive attempt to control weight and has nothing to do with fitness, because fitness requires action. Ninety-five percent of people

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who lose weight by dieting regain the weight, and the simple fact is that diets are not the solution to weight loss.\textsuperscript{41}

For people who do not have an extreme amount of weight to lose, there may be little or no actual weight loss with this program, and over time, these people may actually gain weight by adding muscle. This type of weight gain is not negative. Muscle weighs twice as much as fat and takes up half the space. Strength training builds muscle. Focusing on body weight alone can bring disappointment, in spite of much progress, because a considerable amount of fat loss can be washed out with just half as much muscle gain. Body weight is simply overrated. Who would call a 6’5”, 270 pound National Football League defensive end with 12 percent body fat and a 34-inch waist out of shape? Adding muscle is always good because, unlike fat, muscle burns fuel in the form of calories on its own, all day long, even while resting. The more muscle a person has, the more calories that person will burn each day.\textsuperscript{42}

Weight and weight loss are not the determining factors of fitness or progress. Far more important indicators are how clothes fit, drops in clothes size, increased strength and energy, and changes in body shape.\textsuperscript{43} Dr. Kenneth Cooper tells a story about one of his patients, a forty-five year old man who was proud that he had maintained his college weight of 158 pounds. But his weight did not reflect his college-age level of fitness. He was now 24 percent body fat and no longer fit in his older clothes. Even though his weight was still the same after more than twenty years, he had lost muscle and gained body fat.\textsuperscript{44}

\textsuperscript{41} Carole Lewis and Marcus Brotherton, 24.
\textsuperscript{42} Ibid., 182-183.
\textsuperscript{43} Kenneth Cooper, 40.
\textsuperscript{44} Ibid.
Theoretical Basis for the Project

The Bible does not give a direct command to exercise, but it does say enough to support a Biblical principle of making our health and fitness an area of responsibility and concern. The most direct verse may seem to imply that physical fitness is not very important, but that is not the case. Paul said in 1 Timothy 4:8, "Physical training is good, but training for godliness is much better, promising benefits in this life and in the life to come." Paul was addressing priorities, not devaluing exercise. He assumed his readers would agree with the importance of exercise, so he used it as an illustration.45

Paul gave insight into how important our bodies are to God in his prayer for the Christians at Thessalonica. He wrote in 1 Thessalonians 5:23, “Now may the God of peace make you holy in every way, and may your whole spirit and soul and body be kept blameless until our Lord Jesus Christ comes again.” Speaking of these three elements of our being, spirit, soul, and body, former pastor of Bellvue Baptist Church in Memphis, Tennessee, Dr. Adrian Rogers, said:

With our spirits, we have spiritual life and relate to the world above us; with our souls, we have emotional life and relate to the world within us; and with our bodies we have physical life and relate to the world around us. When we’re right spiritually, we’re holy, when we’re right emotionally, we’re happy, and when we’re right physically, we’re healthy.46

In 1 Corinthians 6:19-20, Paul said, “Don’t you realize that your body is the temple of the Holy Spirit, who lives in you and was given to you by God? You do not belong to yourself, for God bought you with a high price. So you must honor God with your body.” Here on earth, individuals live in earthly bodies and so does the Holy Spirit. They are to take care of the Holy Spirit’s dwelling place and be good stewards of everything God entrusts to them. Sexual sin is


46 Jack Graham, 50.
the direct context of these verses, but sex is not the only way we violate, abuse, or neglect our bodies. We can dishonor God with our bodies by eating too little or too much, by abuse or neglect, or by putting harmful things in them.

Just prior to Paul’s words about honoring God with our bodies, he wrote in 1 Corinthians 6:12, “You say, ‘I am allowed to do anything’ - but not everything is good for you. And even though ‘I am allowed to do anything,’ I must not become a slave to anything.” Christians cannot use their Christian freedom to hurt others or themselves. Just because an action does not physically hurt someone else, it does not mean it is harmless because hurting one’s self is also a violation of God’s commands. Drinking too much leads to alcoholism, eating too much leads to obesity, and being too focused on any physical activity leads to idolatry.47

Paul used much athletic terminology in his writing, and he appears to place a high value on physical fitness. In 1 Corinthians 9:27, he stated that he disciplined his body like an athlete, training it to do what it should. He was “determined that if God chose to leave him on earth for the sake of the church, he was going to finish his course with energy.”48

God did not design humans to be sick, but strong, and He wants health, not sickness.49 Human sin is the reason we are sick and broken. Babies born with deformities are not normal. These babies bring us pain and sadness, and normally undergo surgeries to help or remedy the problems. Doctors even perform surgeries on unborn babies to fix defects before birth. God designed us perfectly and without flaw. Ephesians 2:10 says, “For we are God’s masterpiece. He has created us anew in Christ Jesus, so we can do the good things he planned for us long

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48 Jack Graham, 50.

49 Ron Kardashian, 85.
ago.” God did not design His masterpiece to be sickly, feeble, frail, or to struggle through daily activities because of excess body weight or lack of strength. The Apostle John wrote specifically to Gaius and generally to all Christians in 3 John 2, “Dear friend, I hope all is well with you and that you are as healthy in body as you are strong in spirit.”

Romans 12:1-2 says that worship involves a bodily offering to God, and this bodily offering involves a living, pure, and acceptable sacrifice. A person must offer God his very best, and anything less is unacceptable. The author’s survey results and national statistics prove that at least half of all pastors are incapable of offering their bodies as acceptable sacrifices to God. They are incapable because of the way they eat and care for their bodies, but they can change the status of their sacrifice the very moment they begin to do something about their physical condition. They do not have to wait until they reach a certain level of health and fitness because obedience comes from the heart. Obedience is more important than performance or appearance. The willingness to do what pleases God is what makes sacrifices and offerings acceptable, and true willingness always results in action.

These verses also give a warning not to copy the patterns and behavior of the world. Just because America is 65 percent overweight or obese, individuals are not free to fall into that pattern any more than they are free to fall into America’s shift away from the Christian faith.

Lastly, a person’s love for his body is an inherent characteristic. He naturally desires to sustain, enhance, and defend his body. He does not have to tell himself to duck a punch or to run from a snake (or for some, a very small, harmless bug). He adds clothing when he is cold, and finds ways to cool himself when he gets hot. He eats when he hungry and puts away food for

50 Ibid., 138.

later consumption. He builds shelter to protect himself from the wind and rain. He immunizes himself from viruses and diseases and takes precautions to avoid sickness. Yes, it is obvious that humans love their bodies. Ephesians 5:28-29 says, “Husbands ought to love their wives as they love their own bodies. For a man who loves his wife actually shows love for himself. No one hates his own body but feeds and cares for it, just as Christ cares for the church.” This self-love honors God. If a person do not love himself, it is impossible for him to love others. A lack of concern for one’s body means a lack of love for one’s body, an inability to love others as God commands, and disobedience to God. Jesus said in Luke 10:27, “‘You must love the LORD your God with all your heart, all your soul, all your strength, and all your mind.’ And, 'Love your neighbor as yourself.'”

**Statement of Methodology**

The proposed design of this project includes seven chapters. Below is the chapter listing, followed by a brief summary of each chapter.

**Chapter 1: Introduction**

**Chapter 2: Fitness Facts: Understanding Fitness**

**Chapter 3: The Connection Between Fitness and Diet**

**Chapter 4: The Pastoral Fitness Survey Results**

**Chapter 5: How to Begin A Lifestyle of Fitness**

**Chapter 6: The Components of the Fitness Program**

**Chapter 7: The Execution of the Fitness Program**

Chapter 1: Introduction

The introduction is an outline of the entire project that will let the reader know what to expect. This chapter will include the author’s purpose in choosing the topic, a statement of the problem that will be addressed, a statement of limitations, the theoretical basis of the project, a statement of methodology, a review of the literature used, and the survey used.
Chapter 2: Fitness Facts: Understanding Fitness

An explanation of fitness will be given. To start, some popular false beliefs will be countered. The benefits of fitness will be given, as well as the health risks from a lack of fitness. There is no unique picture of fitness because there are different body types. Each body type will be given, along with its strengths and weaknesses. A person’s expectations must match his body type or he will never be satisfied. Appearance is not equal to fitness level. It is impossible for one body type to transform into another. Age will also be discussed, and specifically, the fact that age is irrelevant to fitness. The body has a natural ability to respond to resistance and make improvements, even into the final years of life.

Chapter 3: The Connection Between Fitness and Diet

Fitness is assisted by diet, but diet does not lead to fitness. In reality, everyone is on a diet because diet is simply what we eat. A passive measure like dieting will never accomplish fitness because fitness requires an action. A poor diet can easily compromise many of the benefits of fitness. Some simple diet tips will be given. No radical diets are involved because they do not work. The negative statistics of dieting will be discussed.

Chapter 4: The Pastoral Fitness Survey Results

The author created an online fitness survey of twenty-five questions and distributed it to pastors all across America. Three hundred ninety-two responses from all fifty states will be discussed. The survey and complete results will be included in an appendix.
Chapter 5: How to Begin A Lifestyle of Fitness

As mentioned in the Statement of the Problem section, getting fit and/or losing weight is the most popular New Year’s Resolution year after year, but most of these resolvers never follow through. The most popular reason is Delayed Onset Muscle Soreness (DOMS), the pain and soreness that occurs twenty-four to forty-eight hours after exercise. Several weeks of light training are needed to prepare the body, and this light training keeps DOMS to a minimum. Even when it feels as if nothing is being accomplished during this preparation period, it is essential. DOMS is much less severe after the body becomes used to regular exercise, and is even recognized as a sign of progress. Instructions for properly and less-painfully beginning a fitness program will be given, as well as the proper motivation for wanting to get fit. Common excuses that prohibit fitness, basic lifestyle changes that promote fitness, and realistic expectations will be discussed.

Chapter 6: The Components of the Fitness Program

Health and fitness requires three active components: strength training, cardio training, and flexibility training. Basic terms will be defined and explanations and benefits will be given. Criteria for choosing a gym will be given, and the pros and cons of working out with a partner will be discussed.

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Chapter 7: The Execution of the Fitness Program

A great portion of this chapter will be spent on explanations and instructions for every exercise of the program, and pictures of each exercise will be given in an appendix. Different types of workouts will be described, including a two-day workout, a three-day workout, a full-body routine, and a resistance tube workout which can also be used for travel. Any of the workouts will produce results, but the very best one for each person is the one he is most likely to do.

Review of Literature

To research for this project, the author used both Christian and secular sources, including books, magazines, journals, websites, and theses. A summary of some of the more useful sources follows. Primarily, the Christian sources focused on Biblical principles regarding the stewardship of the body, and the secular sources focused on health and fitness statistics and the science and mechanics of exercise. Not every section of every source was used, as some sources contain additional information that was not within the limits of this project.

Christian Sources

Joseph Christiano’s *My Body God’s Temple*[^54] is a fitness book written by a former Mr. USA runner-up. Christiano’s bodybuilding experience gives him fitness credibility that other authors lack. Strength training and proper motivation for fitness are two of his topics that were vital to this project.

[^54]: Joseph Christiano.
Are You Fit For Life\textsuperscript{55} is written by Jack Graham, pastor of Prestonwood Baptist Church in Plano, Texas. Graham takes a different approach from most other fitness authors by not writing a self-improvement plan. He shows how the Bible addresses fitness and how a person can honor God with his body.

Dr. Kenneth Cooper, known as the “Father of Aerobics,”\textsuperscript{56} tells how his own lack of fitness in his twenties led him to devote his life to better health and fitness for himself and others in Faith-Based Fitness.\textsuperscript{57} He makes the connection between the spiritual life and the physical life and gives medical research as he tells how to live a longer, more energetic life, reduce the chance of heart problems and disease, improve the immune system, and handle stress and emotions. He also gives a variety of exercise charts and statistics to develop a personal fitness program and to evaluate progress.

G. Lloyd Rediger speaks specifically to pastors about fitness in Fit to be a Pastor.\textsuperscript{58} He stresses that to fulfill God’s call, pastors must be fit in mind, body, and spirit, and he talks about the failures of pastors in the area of fitness. Rediger states that pastors, more than anyone else, need to be physically fit. The nature of the call demands fitness, as does the example pastors set.

In Faith and Fitness,\textsuperscript{59} Tom P. Hafer discusses the benefits of cardio and strength training exercises, and tells how to properly combine them for maximum benefit. He tells a personal story of starting his own physical therapy clinic, and describes how his dreams of working with high-profile athletes were destroyed when his clinic soon filled with senior citizens seeking help.

\textsuperscript{55} Jack Graham.

\textsuperscript{56} Ibid., 58.

\textsuperscript{57} Kenneth Cooper.

\textsuperscript{58} G. Lloyd Rediger.

\textsuperscript{59} Tom P. Hafer.
with daily functions. His professional experience allowed him to gain valuable insight into how the body can repair and thrive, even into old age, and he shares this information. With a Master of Arts in Religion, Hafer is able to balance his strength and fitness expertise with Biblical principles of bodily stewardship.

Carole Lewis is the national director of First Place, the world-known weight loss program. Along with Marcus Brotherton, she wrote *First Place 4 Health*. Lewis shows people how to manage their weight through exercise and better food choices with fitness principles and encouragement from the Bible. The book and the program focus on creating balance in four core areas of life: spiritual, mental, emotional, and physical.

Dr. Ben Lerner has served as a doctor for the U.S. Wrestling Team in two Olympiads. In *Body By God*, he describes his own childhood struggle with health and fitness and how he overcame them to become a college wrestler. He shows how diets do not work long-term for fitness and weight management, and he shares strength training and exercise tips that are both scientific and practical. He also describes various strength training programs that vary in duration and intensity, allowing anyone to begin where they are. Reading this book gives encouragement to exercise, even to those who are already committed exercisers.

Stephen Arterburn and Dr. Linda Mintle wrote *Lose It for Life*, a solution for permanent weight loss from a Christian perspective. Arterburn is the founder of New Life Ministries, the Women of Faith conferences, and host of the nationally syndicated New Life Live! radio program. Arterburn and Mintle believe losing weight and keeping it off will happen when

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60 Carole Lewis and Marcus Brotherton.
61 Ben Lerner.
62 Stephen Arterburn and Linda Mintle.
63 Ibid.
people change the way they think, feel, and act - not when they start an exercise program or diet. Lifestyle change is the key, and quick fixes do not work. They combat common excuses for unhealthy lifestyles and give helpful information on metabolism, fitness basics, nutrition, and portion sizes.

“Nine Other Reasons to Exercise,”64 written by Bonnie Liebman in the December, 2009 *Nutrition Action Health Letter*, lists nine benefits of exercise, some of which are not well-known. Aside from helping lower blood pressure, heart disease, diabetes, and stroke, exercise also builds bone (which reduces the risk of broken bones), minimizes arthritis pain, increases the size and number of mitochondria (the fuel-burning centers of muscle cells), and helps lower the risk of falls among older adults.65

Branda Polk is a personal trainer, lifestyle wellness coach, and fitness writer from Lebanon, TN who is regularly featured in Lifeway magazines such as *HomeLife*,66 *ParentLife*,67 and *Mature Living*.68 At least twenty of her articles were used, and they contain useful information on strength and fitness benefits, instruction, motivation, and easy lifestyle and diet changes.

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65 Ibid.


67 Ibid.

68 Ibid.
Gary L. Scheer addresses the role of pastoral fitness in the development of a healthy church in his dissertation, “Three Keys to Pastoring a Healthy Church.” An unhealthy pastor cannot handle the burden of leading a healthy church for a long period of time. He states that pastors often ignore their own personal health and fitness for other matters that are deemed more important. Neglecting the body is a physical and spiritual mistake. Scheer cites results of one study that found that pastors rank the physical body as the least important part of a person’s being and that nutrition and exercise are of less interest to pastors than the general population.

**Secular Sources**

*The Body Fat Solution* is written by Tom Venuto, a personal trainer, nutrition researcher, consultant, and a natural, steroid-free bodybuilder. He gives instructions for building muscle, losing fat, and maintaining a healthy weight. He discusses body fat myths, emotional eating, and how to feel full on less food, and gives detailed instructions for a variety of strength-training programs. He also covers the often overlooked preconditioning phase of strength training, which is a low-intensity, four to six week start. Without this preconditioning phase, the body reacts poorly to the stresses of strength training, which results in severe muscle pain and leads to a high dropout rate among beginning exercisers.

A group of fitness and strength training books provided definitions of terms, exercise instructions, the muscles each exercise targets, benefits, illustrations, scientific explanations, fitness routines, advice, and encouragement. Most of these books contain similar information,
but each contributed to the specific fitness program found in this project. These books include the following: *Weight Training For Dummies* by Liz Neporent and Suzanne Schlosberg, *Workouts For Dummies* by Tamilee Webb and Lori Seeger, *The Body You Want In the Time You Have* by Myatt Murphy, *101 Workouts* by Michael Berg, *Muscle in Minutes* by Steve Leamont, *The Men’s Health Guide to Peak Conditioning* by Richard Laliberte and Stephen C. George, *The Body Sculpting Bible For Men* by James Villepigue and Hugo Rivera, and *The Complete Idiot’s Guide to Weight Training* by Diedre Johnson-Cane, Jonathan Cane, and Joe Glickman.

Dr. Steve Jonas challenges the notion that exercise is of little benefit in his *AMAA Journal* article, “They’re Baaaack, Again!!!” Spurred on by an August 9, 2009 *Time Magazine* cover, Jonas exposed *Time* writer John Cloud’s ignorance of scientific research that supports the following cited works.

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80 Diedre Johnson-Cane, Jonathan Cane, and Joe Glickman.

benefits of exercise. Jonas states that exercise can be fun when a person finds a form of exercise they enjoy and look forward to. Exercise does not have to be drudgery.

Edward H. Nessel’s *AMAA Journal* article, “The Physiology of Being in Shape: Adaptation at its Best,” gives a concise and scientific explanation of the physiological changes that take place during different types of exercise, an explanation that answers plenty of questions among exercisers. Nessel talks about the necessities of exercising for endurance, strength, and power, and advises cross training between the three types.

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CHAPTER TWO

FITNESS FACTS: UNDERSTANDING FITNESS

Countering Popular Fitness Myths

Fitness has nothing to do with body size, and there is no easily recognized “picture of fitness.” It is possible to be overweight and fit or thin and unfit. Body weight does have an effect on fitness, but fitness involves emotional, mental, spiritual, and physical health.¹

The average person would likely be shocked to learn that body weight is the least important tool for measuring fitness progress. The human body is made up of 60 - 70 percent water. With minor dietary changes, water loss can lead to a fluctuation in weight of two to seven pounds. This amount of water weight can also be lost in a single day with the right conditions, such as working in the yard all day during the summer without properly rehydrating.

An obsession with weight is a terrible distraction to more important concerns. No one can gain or lose any real, noticeable weight in a day, so there is no reason to check the scales every day. Periodic checks are good, but anything more puts the emphasis in the wrong place. Because muscle weighs more than fat, any fitness program may result in added weight, even though dramatic changes in body size come with it. More attention should be given to body changes than body weight. Adding body weight in the form of muscle is always good because

¹ Carole Lewis and Marcus Brotherton, First Place 4 Health: Discover A New Way to Healthy Living (Ventura, CA: Regal, 2008), 193.
muscle increases the number of calories burned. In other words, adding muscle increases metabolism.²

Fitness cannot be viewed as a check-listed accomplishment like earning a degree. Once a degree is earned, it is forever owned, but fitness is not forever owned unless it is forever maintained. Fitness is not gained or lost in any short period of time. When a lifestyle of fitness is developed, fitness becomes stronger and more difficult to halt.

Many people sabotage their own fitness by believing that their diet and physical activity practices are much better than they really are. Research shows that most people underestimate the amount of calories they consume and overestimate the amount of calories they burn through physical activity. This denial or misperception is a major factor in the growing obesity rate in America.³

Fitness cannot be attained quickly. Most commercial fitness products use unrealistic expectations as marketing schemes to sell their products. To the fitness-educated, it is obvious that most of the people who “transformed” their bodies in a few short weeks using a certain product as shown in before and after photos were already fit before their “transformation.” Fitness product marketers are aware of the power of a little lost body fat, a tan, and a sucked-in stomach (as opposed to an intentionally bloated stomach). These marketers are more concerned with making money than with helping people get fit. The promise of a completely transformed body in a few short weeks or months is not only impossible for most people, but also should never be presented as the goal. Short-term fitness goals are rarely achieved, and they lead to frustration, quitting, unused gym memberships, and dusty home gyms. The full benefits of

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exercise can only be experienced when fitness is viewed as a lifetime goal. What difference does it really make if a desired weight is reached or an article of clothing fits just for one moment in time, like a wedding or a reunion? These kinds of temporary goals bring the overwhelming feelings of guilt, defeat, and embarrassment.⁴

Although some body types are more prone to excess weight, genetics do not limit a person’s ability to be fit. Dr. Claude Bouchard of the Human Genomics Laboratory in Baton Rouge, Louisiana gives the following contributing factors as causes of obesity: physical environment, social environment, behavior, and genetics.⁵ He states that the current obesity problem has developed only over the past fifty years, and therefore, it cannot be blamed on genetics. Genes that are prone to more body weight only express themselves “when a genetic predisposition meets an ‘obesogenic environment’ – where calorie-dense processed foods are readily available, activity is reduced by labor-saving devices, and a sedentary lifestyle is encouraged.”⁶ The claim that genetics is the cause of a person’s physical state is completely false. Genetics is just one part of the obesity problem, but people generally feel better when their problems can be blamed on something outside their control. Regardless of genetics or current body composition, anyone can get fit.


⁶ Ibid.
Fitness Benefits

Getting fit is life-changing. Fitness allows an individual to live the life God made him to live, and to accomplish the divine destiny that God planned for him.\(^7\) An exhaustive list of fitness benefits is impossible, but there are some primary benefits that appeal to everyone, regardless of gender, age, or occupation. Fortunately, these benefits begin as soon as fitness improves, not when a hyper-level of fitness is reached. Kenneth Cooper, a medical doctor who devoted his career to studying the benefits of exercise, states that “Becoming even moderately fit will dramatically reduce your risk of getting cancer, heart disease, and a host of other diseases.”\(^8\)

Two categories of fitness benefits will be examined, and the first is health benefits. Regular exercise reduces the risk of heart disease and cancer, the top two killers in America, as well as other major health problems. People who do not exercise have the same chance of developing heart disease as people who smoke. The chances of stroke are reduced when 1,000 or more calories are burned weekly through exercise.\(^9\) Staying fit drastically reduces the chances of developing non-insulin dependent diabetes because it lowers blood sugar and blood fat levels. Even for those with diabetes, exercise helps to control the symptoms.\(^10\)

More than 150 studies prove that exercise reduces stress by reducing body tension and by strengthening coping ability. Reduced stress and tension mean fewer tension headaches.\(^11\) Strength training strengthens and builds bones, offsetting the normal bone loss that men and women begin to experience between the ages of thirty and forty. While weight-bearing activities

\(^7\) Ron Kardashian, *Getting in Shape God’s Way* (Lake Mary, FL: Siloam, 2009), 84.

\(^8\) Kenneth Cooper, 19.


\(^10\) Ibid., 11.

\(^11\) Ibid., 10, 11, 13.
like walking and running keep bones strong, strength training actually builds bone, which reduces or eliminates the chance of osteoporosis. Starting a strength training program earlier in life reduces the chances of osteoporosis because it allows more time to build up bone size and strength.\(^\text{12}\)

Exercise is preventive maintenance. Even moderate exercise strengthens the immune system, and regular exercisers suffer from the common cold half as often as non-exercisers. Obesity increases the risk of gallstones, so getting fit reduces the chances of gallstones and gallbladder surgery. For women, the symptoms of PMS (bloating, lower back pain, headaches, anxiety) are reduced with fitness, and some women who exercise regularly report no PMS symptoms at all. Fit menopausal women are less likely to experience hot flashes and severe mood fluctuations.\(^\text{13}\)

Exercise reduces the risk of bone, joint, and muscle injuries during recreational activities, which allows for better performance, more enjoyment, and less worry. When injuries do occur, fit people recover much faster. With serious injuries, less fit people have lower survival rates and longer recovery periods.\(^\text{14}\) A study of military recruits found that those with below-average leg strength were five times more likely to develop stress fractures in their leg bones during basic training.\(^\text{15}\) By strengthening the wrist and arm muscles, exercise reduces the risk of carpal tunnel syndrome among those who do repetitive-motion tasks.\(^\text{16}\)

\(^{12}\) Ibid., 10.

\(^{13}\) Ibid., 11, 18.

\(^{14}\) Ibid., 11-18.

\(^{15}\) Ibid., 14.

\(^{16}\) Ibid., 14.
Exercise lowers the chance of developing high blood pressure by thirty-percent, and may also help lower blood pressure in people who are already hypertensive. It eases lower back pain (by strengthening the abdominal and lower back muscles), arthritis pain, and varicose vein pain. It promotes prostate health, higher metabolism, higher blood plasma volume (which thins the blood and reduces the risk of clots), lower LDL cholesterol (the bad, artery-clogging low density lipoprotein type), and lower resting heart rate. When the heart is stronger, it beats fewer times to pump the same amount of blood, preserving the cardiovascular system.17

The second category of fitness benefits involves lifestyle. An eight-year study of more than twenty thousand men shows that fit men live longer. The study revealed that lean men who were unfit were twice as likely to die earlier than men who were lean and fit, and that even overweight men who were fit had a lower death rate than men who were lean but unfit.18

Living a long but unhealthy life is not desirable. Health and mobility need to accompany longevity for life to be enjoyable and productive. Fit people have less body fat and maintain a lower set point, which is the weight a person tends to maintain.19 They sleep better, spend more time in slow-wave sleep (the most restorative phase of sleep), and wake up during the night less often. They have more energy, which comes directly from exerting energy during exercise. Using the excuse that exercise requires too much energy actually keeps people from finding that exercise is a great source of energy.20

Exercise gives an image-boost. It is the greatest way to reshape the body. Pregnant women who exercise have fewer aches, more energy and endurance, and better self-image than

17 Ibid., 12, 13, 17.
18 Ibid., 10.
20 Suzanne Schlosberg and Liz Neporent, 10.
those who do not. A review of eighty clinical studies on depression states that depression appears to end after four weeks of regular exercise.\textsuperscript{21} Not only does exercise make people look younger, but it makes people feel younger. It is restorative. One study found that postmenopausal women who lifted weights twice a week for one year regained the strength and bone density levels of women fifteen to twenty years younger.\textsuperscript{22} Exercise leads to better performance on the job, which in some cases, equals more income. It also leads to better performance recreationally and sexually.\textsuperscript{23}

Aside from greater energy and strength, productivity and performance are also improved by exercise. In a six-month study of previously sedentary men and women ages sixty to seventy-five, those who exercised three times per week scored 25 percent better on memory and judgment tasks. Balance is improved, which leads to fewer falls and injuries, especially in later years. Stronger core muscles improve posture. Flexibility improves, which also leads to fewer injuries.\textsuperscript{24}

Exercise has a positive effect on the mind, as well. Regular exercisers perform better in school. Exercise provides an instant mood boost and leads to improved long-term levels of happiness and satisfaction. It also provides a healthy outlet for anger and a way to satisfy competitive urges. The greater physical abilities provided by exercise allow for more physical opportunities and more chances of fun.\textsuperscript{25} Because exercise increases metabolism and burns

\textsuperscript{21} Ibid., 14.
\textsuperscript{22} Ibid., 14.
\textsuperscript{23} Carole Lewis and Marcus Brotherton, 179-181.
\textsuperscript{24} Suzanne Schlosberg and Liz Neporent, 12-13.
\textsuperscript{25} Ibid.
calories, more food can be eaten without gaining weight. Fit people who exercise regularly can eat a dessert without guilt, remorse, or the fear that clothes will no longer fit.26

Saving money and setting a good example are two final lifestyle benefits of exercise. All the health benefits of exercise result in less sickness and fewer doctor visits. With childhood obesity at an all-time high, and with the average child viewing television for more than twenty hours per week, exercising regularly sets a good example for children to follow. It shows a balance of priorities, which is necessary to be a leader in any area of life.27

Despite all the benefits of fitness, many people still refuse to make fitness a goal. Body building champion and minister Ron Williams says, “Our bodies are the temple God wants to dwell in and we should give Him a house that performs at the highest level possible. If you are unhealthy from lack of exercise and poor nutrition, this isn’t a threat to your salvation, nor does it mean you won’t make it to Heaven; your unhealthy state just might cause you to get to Heaven a little faster.”28

**Health Risks Associated With A Lack of Fitness**

Being overweight has serious consequences, and not just cosmetically or aesthetically. It kills. God did not design us to be overweight. Approximately three hundred thousand deaths per year are directly related to obesity.29 Carrying just ten pounds too many can shorten life expectancy, reason enough for every good steward to begin taking action steps toward fitness.30

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26 Ibid., 18.
27 Carole Lewis and Marcus Brotherton, 33.
28 Ron Williams, 15-16.
29 Carole Lewis and Marcus Brotherton, 168.
30 Ron Williams, 5.
The first health risk is not a disease, but a law that allows all the other health risks to occur: the Law of Adaptation. Over time, the body adapts to the stresses imposed on it by whatever environment it is in and by whatever situations it regularly faces.³¹ People all over the world have adapted to the climate, germs, altitude, workload, and food of their area. With the Law of Adaptation, as the body adapts to certain stresses, it un-adapts to opposing stresses. People from warm climates are not prepared for cold weather, and vice versa. This is true of the indigenous people of each area, but it is also true in the short-term. The author has a missionary friend from South Carolina. He and his family served for three years in Africa, and upon returning home, it took them a while not to feel cold in the South Carolina summer, which generally means daily highs of around ninety degrees. Describing the Law of Adaptation, Ben Lerner teaches, “In the case of exercise, if you participate in a regular fitness program, the forces you apply will cause you to adapt and get stronger, leaner, and healthier. If you rarely move, however, the lack of forces will cause you to adapt and get weaker, fatter, and sicker.”³²

Atrophy is a result of the Law of Adaptation principle of “use it or lose it.” Atrophy is the loss of muscle. Anyone who has broken an arm or leg has seen the results of atrophy. When the cast is removed just a few weeks later, the muscles are always smaller because they could not be moved or exercised. This is a “classic example of resource allocation. If your body knows you are using crutches instead of quadriceps then it figures, ‘Forget this, I’ll put my energy elsewhere.’³³ This process of muscle loss does not occur just from a complete lack of

³¹ Ben Lerner, 142.
³² Ibid.
³³ Ron Kardashian, 187.
movement. Atrophy happens naturally as people age. Kenneth Cooper warns that without a regular program of strength exercises,

a steady loss of muscle mass will inevitably occur after about age thirty. By some estimates, there’s a 3 to 5 percent loss of muscle mass every ten years, beginning between age thirty to forty. Some experts say that the total loss of muscle mass between ages thirty and seventy may be as high as 30 to 40 percent, or an average of 10 percent every ten years during this period. After age seventy, as most people become more sedentary, the loss of muscle mass may accelerate.\textsuperscript{34}

Atrophy is a general health hazard because it slows metabolism. Metabolism will be discussed in greater detail in Chapter Three: The Connection Between Diet and Fitness, but since muscle burns calories, a loss of muscle results in a loss of calorie burning ability. Unburned calories are stored as body fat. As people lose muscle from a lack of exercise, they get weaker, but at the same time, they get fatter and heavier. This combination of reduced strength and increased size brings an escalation of unfitness and health risks.

While women naturally store excess fat on their hips and thighs, men naturally store it in the worst possible place: the abdomen. Excess abdominal fat is associated with an increased risk of coronary artery disease, elevated triglycerides, hypertension, and cancer.\textsuperscript{35} Both unfit men and women are at a greater risk for a variety of diseases and health problems, including heart disease, stroke, high blood pressure, high triglycerides, high “bad” cholesterol (LDL), low “good” cholesterol (HDL – high density lipoprotein), and inflamed blood vessels.\textsuperscript{36}

A definition of triglycerides is necessary because it is not as commonly understood as cholesterol. Triglycerides are a type of fat found in blood. The body converts any calories it does not need into triglycerides and stores them as fat cells. Because triglycerides cannot

\textsuperscript{34} Kenneth Cooper, 41.
\textsuperscript{36} Ibid., 83.
dissolve in blood, they circulate throughout the body until they are stored. High triglycerides may contribute to hardening of the arteries or thickening of the artery walls, which ultimately results in stroke or heart attack.\textsuperscript{37}

Type II diabetes is another health risk from a lack of fitness, and to no surprise, it is most common in the United States. Type I diabetes, also known as juvenile diabetes, is the result of the pancreas not producing insulin. It usually starts in childhood and may be present at birth, but it most often results from an autoimmune reaction in which the pancreas is affected by a virus. Type II diabetes occurs when the pancreas produces too little insulin or when the body has built a resistance to insulin and is no longer as effective at using sugar for energy. Type II diabetes represents 90 percent of all diabetes cases, and it is linked directly to poor diet and a sedentary lifestyle.\textsuperscript{38} Eighty percent of people with this disease are overweight.\textsuperscript{39}

A sedentary individual who never exercises sometimes experiences higher blood sugar levels. With a diet of excessive carbohydrates like refined sugar and processed flour, blood-sugar will start to rise simply because the body becomes resistant to the high amounts of sugar in the blood. Insulin is no longer effective enough to keep up with all the excess carbohydrates, and the body has no other way to burn all the sugar in the blood.\textsuperscript{40}

Exercise counters this problem. Healthy, conditioned muscles have the capacity to quickly select their fuel source (sugar or fat) during times of fasting or feeding. Untrained muscles are more insulin resistant and are unable to use sugar efficiently for energy even with


\textsuperscript{38} Tom P. Hafer, \textit{Faith and Fitness: Diet and Exercise For A Better World} (Minneapolis, MN: Augsburg Fortress, 2007), 103-104.

\textsuperscript{39} Stephen Arterburn and Linda Mintle, 83.

\textsuperscript{40} Tom P. Hafer, 103-104.
insulin present. Tom P. Hafer says, “Think of unexercised muscles as having less ability to use the energy source they have. That is why the more you exercise the better you are at utilizing calories - and the less likely you are to develop Type II diabetes.”

Being overweight also raises the risk for several types of cancer, including esophageal cancer, uterine cancer, postmenopausal breast cancer, and kidney cancer. Cancer is the second leading cause of death in the United States. One possible link between these cancers and being overweight is that fat cells make hormones that might affect cell growth.

Osteoporosis is a bone disease characterized by brittle and porous bones that break easily and result in such deformities as the outwardly curved upper spine known as “dowager’s hump.” These conditions can be debilitating and even fatal. By the age of seventy, a third of all women and a sixth of all men will suffer a hip fracture. Osteoporosis is best combated with strength training, not calcium supplements. Strength training builds bone and “the most effective prevention of osteoporosis is early rigorous exercise that includes weight-bearing and some sort of weight lifting.”

Carrying too much weight causes osteoarthritis, a joint disorder in which the tissues that protect joints, bones, and cartilage gradually wear away. The most commonly affected areas are the knees, hips, and the lower back. The more weight people carry, the more pressure they put on their joints and cartilage.

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41 Ibid.
42 Ibid.
43 Kenneth Cooper, 43.
44 Tom P. Hafer, 100.
45 Stephen Arterburn and Linda Mintle, 84.
For those who already suffer from arthritis, exercise is the remedy. Once pain appears in any joint, exercising the joint to replenish it with nutrients should always be the first treatment choice. Cartilage has a poor blood supply and gets its nutrients from synovial fluid inside the joint. It is actual joint movement that allows the joint to become flexible. Compression forces the joint fluids to rebuild and repair the joint. Hafer compares this joint process to working taffy. As cold and brittle taffy is worked (pulled), it warms up and becomes pliable. The initial joint pain from exercise can cause a person to stop out of fear that something is wrong, but movement is normally exactly what the joint needs.\(^{46}\)

Unfit and overweight bodies produce more cholesterol that can cause fat buildup in the liver. The extra cholesterol often develops into solid clusters in the gallbladder known as gallstones.\(^{47}\) The fatty accumulation in the liver causes inflammation and scarring, which can then cause cirrhosis, even among those who are not heavy drinkers.\(^{48}\) As a side note, gallstones often develop in people who lose a lot of weight quickly (more than three pounds per week) and people who try very low-calorie diets. Therefore, modest, consistent weight loss of up to two pounds per week is the recommended goal.\(^{49}\)

Sleep apnea is the final health risk to be discussed. Sleep apnea is not the same as snoring or even heavy snoring; it occurs when a person stops breathing for short periods during sleep. The results are daytime sleepiness, difficulty concentrating, increased blood pressure, and

\(^{46}\) Tom P. Hafer, 98-99.

\(^{47}\) Stephen Arterburn and Linda Mintle, 85.

\(^{48}\) Carole Lewis and Marcus Brotherton, 168.

\(^{49}\) Ibid.
even heart failure. Weight loss helps this condition by decreasing neck size and air passage inflammation.\textsuperscript{50}

**Fitness and Body Types**

God enjoys diversity, as seen in nature with all the varieties of plants, flowers, and trees. He also made many different body types, and all are fearfully and wonderfully made. God did not give one body type as the model for all people. He created human bodies in a variety of shapes and sizes, and each one has specific strengths, weaknesses, capabilities, and limitations.\textsuperscript{51}

While God loves and accepts each body shape and size, Hollywood does not. Hollywood tries to tell the world which body types are beautiful and acceptable, at the exclusion of every other body type. For instance, women models are generally abnormally tall and thin, with eating habits that are detrimental to their own health as well as the health of women around the world who aspire to be like them. (This unhealthy thinness is not limited to female models.)

God decides the physical attributes of every person. An individual can alter his God-given appearance to some degree with diet and fitness, but not enough to change his basic structure. Therefore, instead of trying to fit a mold he was not created to fit and showing God ungratefulness, he should give Him praise and thanks and be a good steward of his body.

Nutritionalist and personal trainer Ron Kardashian says,

Nowhere in the Bible does He say that a human being is born to be anorexic. On the contrary, God says that He made you to be His son or daughter, uniquely created with wonderful gifting and potential. While He desires for your body to be the temple in which He dwells, He does not describe the perfect shape, height, or weight that He prefers. Instead, God places emphasis on the inner beauty of your person, not on the outward physique that will one day perish. God considers the good behavior that

\textsuperscript{50} Stephen Arterburn and Linda Mintle, 84.

proceeds from integrity of character more important than a “Hollywood-type” figure...According to Scripture, what is most precious to God? ...His Word does not teach that a certain physique makes you more or less delightful to Him.\footnote{Ron Kardashian, 161.}

Human somatotypes, or body types, have three distinct characteristics: endomorphy (endomorph or endo), ectomorphy (ectomorph or ecto), and mesomorphy (mesomorph or meso). Some people fall into one of these distinct categories, but most people have a blend of characteristics from two of the categories. These characteristics determine how each person’s body will look, react to exercise and gain or lose weight.\footnote{Tamilee Webb and Lori Seeger, \textit{Workouts For Dummies} (Forest City, CA: IDG Books WorldWide, Inc., 1998), 13.} Figure 2.1 gives representations of the three body types, while figure 2.2 gives representations of blended body types.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{3bodytypes.png}
\caption{The Three Somatotypes.\footnote{\url{http://www.brainyweightloss.com/images/3bodytypes.gif} (accessed March 5, 2010).}}
\end{figure}
The mesomorph (or meso) body type is best described as muscular. Characteristic mesos have the ability to increase muscle size relatively quick and easy. They have well-developed, rectangular shapes with thick bones, defined chests, and shoulders that are larger and broader than their waistlines. Their hips are about the same width as their shoulders, and they have toned buttocks and legs. Sylvester Stallone and Demi Moore are good examples of mesos.

Mesos are well-suited for athletics and are physically capable of high levels of activity. They excel in activities that require strength and short bursts of energy. Conversely, endurance activities are not their forte and they tend to avoid the cardio section of the gym. This avoidance is representative of playing to natural strengths.

Mesos tend to store fat evenly over their bodies and have a high metabolism because of their muscularity and physical activity. Of all the three body types, mesos have the greatest

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56 Tamilee Webb and Lori Seeger, 59-60.

57 Ibid.
ability to stay fit. Unfortunately, as mesos age or become less active, they can easily become overweight unless they also reduce their diet. Cardiovascular disease is a common threat for overweight mesos.\(^{58}\)

The endomorph (or endo) body type is best described as round for males and curvy for females. Characteristic endos have the capacity for high fat storage and a greatest propensity for obesity. The majority of their body weight is centered in the middle, around the hips for females, and in the abdomen for men.\(^{59}\) Structurally, they have large bones, round faces, large hips and thighs, and shorter arms and legs, which result in a stocky appearance.

Because abdominal fat carries a greater risk of heart disease and cardiovascular problems, male endos must be very diligent to control their weight. Unfortunately, endos have a harder time controlling their weight, but it is possible, as Robin Williams has shown. They are naturally strong and can gain muscle easily with weight training. Every ounce of added muscle constantly burns calories, so adding muscle increases metabolism and can make controlling body fat much easier.\(^{60}\)

Female endos have been among the most celebrated women of the last century. Again, the word that best describes endo is curvy, which is an ideal trait for females. Marilyn Monroe is the classic endo example.\(^{61}\) More recent examples are Jennifer Lopez, Beyonce, and Cindy Crawford.\(^{62}\)

\(^{58}\) Ibid.

\(^{59}\) Ibid., 77-78.

\(^{60}\) Ibid., 78.

\(^{61}\) Ibid., 77.

The ectomorph (or ecto) body type is best described as slim. Characteristic ectos have trouble gaining weight: think fashion model. They have a linear shape with narrow hips and longer limbs. Tom Hanks and Courtney Cox are famous ectos.\(^{63}\)

Ectos are well-suited for endurance activities, not physical contact. Like mesos, they have a tendency to stick to what they do best, bypassing the free weights for the cardio equipment. They have longer, thinner muscles, but they can add strength if they give the effort.\(^{64}\)

Ectos have low body fat, one of the best health qualities possible, because of their faster metabolism and tendency for endurance activities. But, a healthy outward appearance is not always an indication of inner health. Ectos who have a poor diet are at a greater risk of high cholesterol, hypertension, and obesity, even though an obese ecto may not look obese.\(^{65}\)

As previously stated, most people have a blend of characteristics from two of these three body types. Expectations for physical appearance and fitness results must be matched to the limitations of a person’s body type. Joseph Christiana stresses that getting results from any exercise starts with knowing your body type. Each body type requires a different exercise approach or methodology for reading its genetic potential. Some types gain weight very easily; other types would have to eat all day to gain weight. Some require very little effort to get great results, while others have to work zealously to see fewer results. There are body types who carry their unwanted weight in the upper body area, and others who gain weight in the hips and thighs. Considering your particular body type will help you choose the exercise program most effective for your needs.\(^{66}\)

A football team is an easy reference point for the three body types and for realistic expectations. Team members will exhibit the normal strengths, weaknesses, and necessities of

\(^{63}\) Tamilee Webb and Lori Seeger, 69-70.

\(^{64}\) Ibid., 71.

\(^{65}\) Ibid., 73.

each body type. Ectos will never match the strength of endos or mesos, and will never have the ability to be a lineman, a linebacker, or a fullback. Endos will never match the agility or speed of ectos or mesos, and will never have the ability to play receiver, running back, or defensive back. Mesos are too small to play on the line, and generally lack the height and agility to be good receivers. No running back wants to run behind a line of ectos. No lineman wants to open holes for endo running backs or have their quarterback throwing to endo receivers. All three types are needed, and each depends on the others for success.

Each individual must accept that his body types prohibit him from developing certain body shapes. If a Cocker Spaniel tries to look like a Labrador Retriever, it will spend its life hopelessly and miserably chasing an impossible dream. For each different body type, there is a level of fitness and an ideal size and shape that can be achieved. But regardless of effort, an ecto will never be able to look like a powerfully built meso because the bone structures are different. Individuals must accept that doing their very best with what they have is all they can do, and furthermore, it is all they are required to do.67

**Fitness and Age**

While it is generally true that fitness level declines with age after about age thirty-five, it is not an absolute. Getting older does not necessitate feeling older, losing strength and vitality, or limiting physical activities. Most people know someone aged seventy or older who continues to participate in physically challenging activities like weight lifting, bicycling, snow skiing, hiking, or jogging. The author’s church has a seventy-six year old male member who serves as an elder, oversees the church’s pastoral care ministry, works a full-time job, exercises daily, and leads tours of the rugged mountains of upstate South Carolina.

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67 Gregory Jantz and Ann McMurray, 15.
There are a variety of prevalent age-related fitness myths, and Dr. Kenneth Cooper exposes them in his book, *Faith-Based Fitness*. Many people believe exercising after age forty is dangerous, but there is no support for this myth, as long as older continuing or beginning exercisers have regular medical checkups. In fact, evidence shows that those who fail to exercise are at greater risk than those who exercise regularly.\(^68\)

With any endurance exercise comes the warning not to exceed the maximum heart rate, which is calculated by the formula $220 - \text{age}$.\(^69\) The second age myth is that maximum heart rate automatically declines with age. The main reason the maximum heart rate declines with age is a lack of aerobic conditioning. A higher maximum heart rate can be maintained by anyone who does aerobic exercise. With a higher maximum heart rate comes a greater working capacity.

Blood pressure does not have to increase significantly with age, although it usually does. Many people do have a harder time controlling blood pressure, but it is generally true that blood pressure can be controlled and kept in the normal range by staying fit. The same is true of body fat percentage. People generally become less fit by choice, not by some unalterable force of nature.\(^70\)

The average person loses between 30 - 40 percent of his muscle mass during his lifetime, but the reason is because most people become less active and less fit as they age. It is commonly thought that increasing muscle mass after age sixty is impossible, but muscle can be added at any age with strength training. Cooper teaches that strength training leads to significant increases in muscle size and strength and in functional mobility, even among nursing home residents up to ninety-six years old. Likewise, people who engage in regular endurance exercise can maintain a

\(^{68}\) Kenneth Cooper, 190.

\(^{69}\) [http://www.brianmac.co.uk/maxhr.htm](http://www.brianmac.co.uk/maxhr.htm) (accessed March 5, 2010).

\(^{70}\) Kenneth Cooper, 194-196.
high aerobic capacity from age forty to about age seventy. It is only in the seventies and eighties that older athletes normally begin to experience declines in aerobic ability, but even at late ages, those who continue to train can remain remarkably fit.\textsuperscript{71}

Another myth is that after age sixty-five, there is no reason to worry about cholesterol, smoking, or hardening of the arteries. Cholesterol levels are important at any age, and no age is too old to benefit from reduced cholesterol intake and blood levels.\textsuperscript{72} Research shows that quitting smoking has significant benefits regardless of age, and atherosclerosis (hardening or clogging of the arteries) can be reversed through dietary changes or prescription drugs.\textsuperscript{73}

Having a heart attack is no reason to discontinue or avoid a fitness program, and for those who have suffered a heart attack, there is no better time to start one. Not only is regular exercise an important part of cardiac rehabilitation, but exercising in a monitored rehabilitation program is safer than exercise among the general population. Heart attack victims are at greater risk when they avoid exercise than when they engage in exercise.\textsuperscript{74}

Myths may be more about laziness than age-related fears. Research shows that people as old as one hundred can dramatically increase their strength, improve their balance, restore bone density, moderate diabetes, and diminish joint pain in just a few weeks of weight training. The minute a person starts sweating, whether he is twenty or ninety, he elevates his heart rate, his arteries get more flexible, and his blood pressure is lowered, thereby lowering the risk of heart

\textsuperscript{71} Ibid.
\textsuperscript{72} Ibid.
\textsuperscript{73} Ibid, 198-200.
\textsuperscript{74} Ibid., 202.
disease and stroke. For hours after exercise, bodies are more sensitive to insulin, keeping sugar levels in check and reducing the risk of diabetes.\textsuperscript{75}

Herschel Walker is a great, modern example of the myths of age’s affect on fitness. Walker won the 1982 Heisman Trophy (presented annually to the top college football player in America) and was a world class sprinter at the University of Georgia from 1980–1982. He played professional football from 1983-1997, and competed in the 1992 Winter Olympics as a bobsledder.\textsuperscript{76} On January 30, 2010, at age forty-seven, Walker competed in his first professional Mixed Martial Arts fight. Critics ridiculed him for entering the sport at such an advanced age, and concerns for his health were daily topics on national sports shows. Despite all the negativity, Walker knocked out twenty-six year old Greg Nagy in a dominating performance.\textsuperscript{77}

Because of his age, Walker had to endure a battery of tests to be sanctioned to fight. Allen Fields, chief physician for the Florida Boxing Commission that also oversees MMA sanctioning, said that not only did Walker pass the most strenuous of all medical athletic tests, but he produced the highest cardiac stress test score of anyone ever tested by his facility. Fields said that Walker was in “as fine a shape as Muhammad Ali or any of these people we’ve had the care of. This guy is 47 going on 22, as far as his physical fitness goes.”\textsuperscript{78} Like all world class athletes, Walker is an anomaly. But unlike most world class athletes, Walker has maintained his fitness as he has aged. Mike Tyson and Bo Jackson are contemporaries of Walker, and at this

\textsuperscript{75} Ben Lerner, 143.


stage of their lives, they look like any other middle-aged, overweight man. Everyone has the choice to age like Walker, or to age like Tyson and Jackson.
CHAPTER THREE

THE CONNECTION BETWEEN FITNESS AND DIET

Getting in shape brings both diet and exercise to mind, but the two are not equal. It is possible to be physically fit without a healthy diet, but not without a fitness routine. Diet assists fitness, but diet cannot bring fitness by itself. Diet can decrease body fat, but it cannot build muscle. Fitness and diet work best together, increasing muscle-to-body-fat ratio and bringing better health. Tom Venuto, a natural bodybuilder and a personal trainer of Hollywood celebrities, says that controlling calorie intake is important, but calorie cutting alone is not ideal. For people to burn the maximum amount of fat, boost their metabolism, and build muscle, more time must be spent on the calorie-burning side of the equation – exercise.

Dieting is not the solution to fitness or even weight loss, and it sets up most people to fail. Ninety-five percent of people who lose weight gain it back again, so dieting is not the solution. Ben Lerner says, “Allow me to be unequivocal – diets don’t work. Diets may produce some results in the short term, but they have no staying power.

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in the long term.”

The cycle of deprivation, giving in, feeling guilty, giving up, and gaining more weight is classic, and it inevitably brings about feelings of failure, shame, and helplessness.5

Nevertheless, books on diet are more prevalent than books on physical fitness. In The New York Times list of best selling books for the week of March 5, 2010, four diet books are in the top ten (including the first and third spots) for paperback advice, and two diet books are in the top ten (including the second spot) for hardcover advice. No books on fitness are on either list.6 The likely reason is that Americans want the solution that feels most comfortable and has the least amount of lifestyle change. They try pills, appetite suppressants, metabolic energizers, and books. They want something that is quick, simple, and relatively painless - a short-term fix to a long-term condition - but it does not exist.7

Fitness and diet are closely connected and a lifestyle of fitness must include a healthy diet. But a lifestyle of fitness is not dependent upon a diet in the popular sense of the word. “Diet” has come to be identified as a period of food restriction. We need to reframe the word “diet” because, according to Venuto, it is “semantically loaded yet ambiguous. To most people it has negative connotations, including deprivation, hunger, and bland foods. A diet is seen as a restrictive eating program that you go on, suffer

4 Ben Lerner, 119.


7 Gregory Jantz and Ann McMurray, The Body God Designed (Lake Mary, FL: Siloam, 2007), 118.
through, and then go off.” A lifestyle of fitness allows a level of freedom with food choices without worry, guilt, or weight gain. Being fit and having a healthy diet does not involve starvation or constant hunger pangs. In reality, everyone is on a diet because “diet” simply means what a person eats.

The goal is to develop a diet that brings health, satisfaction, enjoyment, and a stable weight. We must eat for fitness. Most overweight people are overweight simply because they eat too much, or too much of the wrong kinds of foods. Some people exercise excessively and still do not lose weight because they consume too many calories. These people think that since they exercise, they can eat whatever they want. And although they achieve cardiovascular and muscular fitness, they never lose body fat. Venuto warns, “Without reducing food intake, it can be tough to burn enough calories to get a sufficient deficit” to lose weight.

**No Quick Fixes**

Regardless of the problem, quick fixes are always tempting. The problem with quick fixes is that they do not last for very long. Duct-taping a hole in a garden hose is about as effective as a restriction diet. Quick-fix solutions for weight loss do not work for very long because they drastically change normal eating habits. Normal eating habits are normal because they are easy, comfortable, and available. When elaborate systems of

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8 Tom Venuto, 46.

9 Ibid., 134-135.
preparation or accountability are involved, so is a very small chance of success. Some fad diets are even dangerous and can lead to serious health problems.\textsuperscript{10}

Consistency is a key component of healthy eating that dieting neglects. Dieting is the opposite of consistency. The key to losing weight is not dieting hard for a few weeks, but changing eating habits permanently.\textsuperscript{11} Instead of rash attempts at quick fixes, people should develop an eating plan that works with their fitness plan to ensure that they do not consume more calories than they burn.\textsuperscript{12}

For dietary changes to become permanent, they have to be made slowly. People will not be consistent with things they hate to do or with changes that happen too quickly. Dr. Gregory Jantz, an eating disorder specialist and psychologist, warns people to think of the Titanic when making changes:

Course changing needs to be done slowly over time and with great consistency and concentration. It also, by definition, means you’re heading out in a new direction. If you turn the Titanic, you have to want to change course. Most of us, however, don’t want to change course. What we’d really like is a short diversion. These short diversions are called diets.\textsuperscript{13}

A 2005 study in the \textit{Journal of the American Medical Association} compared four of the most popular diets. It concluded that any of the diets could produce moderate results, but only for those people who were able to stick with their chosen diet. It also found that diets on the extremes had the lowest compliance rates. Diets that force people to eat foods they do not like are usually among the first to fail, regardless of what other

\textsuperscript{10} Stephen Arterburn and Linda Mintle, x.


\textsuperscript{12} Gregory Jantz and Ann McMurray, 119.

\textsuperscript{13} Ibid.
virtues they may have.\textsuperscript{14} Fad diets are neither healthy nor productive long-term. The goal should be “sustainable fat loss and maintenance that becomes a way of life. A F-A-D diet really means feeling awful daily,”\textsuperscript{15} says Dr. J. Ron Eaker, author of \textit{Fat Proof Your Family: God’s Way to Forming Healthy Habits For Life}.

All or nothing dieting leads to all kinds of warped diet fads. Many people decide they have to lose weight immediately or the world as they know it will end. They believe the only way to achieve their goal of immediate weight loss is to adopt some unhealthy and unbalanced fad diet.\textsuperscript{16} To lose fat, calories must be burned or reduced, and the most effective way to create this calorie deficit is through exercise. One pound of body fat represents 3,500 calories, so to lose one pound of body fat, there must be a reduction of 3,500 calories. A five hundred calorie per day reduction would result in the loss of one pound per week for someone with a steady weight. If a person’s weight is steadily increasing, a five hundred calorie per day deficit may not be enough to result in weight loss, but a maintaining of current weight or just slower weight gain.\textsuperscript{17} For these people, a daily reduction of more than five hundred calories is necessary to produce weight loss. The number five hundred is being used simply as an example. Each person’s required calorie reduction will be different based on their unique variables.

\textsuperscript{14} Tom Venuto, xxv.

\textsuperscript{15} J. Ron Eaker, \textit{Fat Proof Your Family: God’s Way to Forming Healthy Habits For Life} (Minneapolis, MN: Bethany House, 2007), 137.

\textsuperscript{16} Gregory Jantz and Ann McMurray, 116.

\textsuperscript{17} J. Ron Eaker, 139.
Easy Diet Changes

There are several easy ways to create at least a five-hundred calorie per day reduction through diet alone. In Chapter Five: How to Begin A Lifestyle of Fitness, some basic lifestyle changes will be given that also help to create a daily calorie deficit. The combination of diet and lifestyle changes can produce slow but safe weight loss, and after a desirable weight is reached, a lifetime of weight maintenance. But here is a cautious warning: after achieving a desirable weight, if the new diet and lifestyle changes are abandoned, a return of the lost weight is imminent.

Dr. Steven Arterburn and Dr. Linda Mintle, authors of Lose it For Life, write that people with poor eating habits can make drastic changes by changing just one of those poor habits. The easiest and most productive dietary change possible, for anyone who has not already done so, is the elimination of beverage calories. As unbelievable as it may sound, it is easy to consume half or more of the daily recommended number of calories just from beverages. Arterburn and Mindle state, “Some authorities insist that much of our society’s obesity comes from one source: carbonated soft drinks – a fancy name for flavored sugar water – are consumed in vat-like 32- to 64-ounce containers.”

Everyone wishing to lose weight should begin their attack with this statement: “I will never drink another useless calorie.” A typical soda has 140 calories per twelve ounce serving, but some twelve ounce sodas contain closer to two hundred calories. Typical sweet tea, like McDonalds’ or Chic Fil A’s, is made with two cups of sugar per

\[\text{\textsuperscript{18} Steven Arterburn and Linda Mintle, 92.}\]
\[\text{\textsuperscript{19} Ibid., 1.}\]
gallon for about 140 calories per twelve-ounce serving. Obviously, the sugar in sweet tea is inconsistent, so some sweet tea may contain more or less calories. Sugar contains fifteen calories per teaspoon, so even putting a few teaspoons of sugar in coffee adds up.\textsuperscript{21} Starbucks’ designer coffees have between 150 and 360 calories per twelve-ounce serving, with eight, sixteen, and twenty-ounce sizes also available.\textsuperscript{22}

A 2,500 calorie per day allotment equals about eighteen typical twelve-ounce beverages, but it must be considered that twelve-ounce servings are not the norm. McDonalds’ cup sizes for small, medium and large are, respectively, sixteen ounces with 150 calories, twenty-four ounces with 210 calories, and thirty-two ounces with 310 calories.\textsuperscript{23} How often do people go back for a refill? How many times does a server refill cups at full-service restaurants? How many of these beverages are consumed throughout the day apart from meals?

Apart from taste, these calorie-rich beverages have zero effect on appetite. An American Journal of Clinical Nutrition study that was conducted between 1990 and 2002 found that “drinking sugar-rich drinks, such as regular soda, did not curb the appetite of a person throughout the day. Those drinking non-caloric drinks and those drinking sugar-rich drinks ate the same volume of food. It is clear that drinking sugar-rich drinks will


\textsuperscript{23} WikiAnswers. “How many ounces does a McDonalds’ cup have?,” http://wiki.answers.com/Q/How_many_ounces_does_a_mcdonalds_cup_have (accessed March 11, 2010).
add to obesity by adding extra calories, but doing nothing to the overall desire for the volume of food in a day.”24

Eating fewer calories can be extremely difficult, but drinking close to zero calories is very simple. Unsweetened tea and coffee have about two calories per eight ounce serving. Most diet sodas have one calorie or less per serving. Water has no calories. When health and fitness are concerned, a temporary sacrifice in taste is of little consequence. The question must be asked, “Will I let the taste of sugar compromise my health and fitness?” To shed unhealthy pounds, there must be a willingness to delay momentary gratification and think with long-term perspective. Temptations can be overcome by thinking about how much small, daily decisions impact a lifetime.25

Adjusting to the taste of diet soda, sugar-free noncarbonated soft drinks, and unsweetened tea and coffee takes time, but with time, these drinks do begin to taste normal. The author, a South Carolina native, weaned himself from the sweet tea he grew up on by diluting it with increasing amounts of unsweetened tea over a few months. Several years later, he finds sweet tea nauseating.

While changing beverage choice has the most dramatic impact, there are other dietary tips or changes that also make a difference. Drinking a full glass of water before meals curbs the appetite. Also before meals, eating a handful of any variety of nuts tricks the brain into feeling full. The nuts provide a protein boost and good fat.26 Instead of using whole milk and whole milk dairy products, use skim milk and skim milk dairy

P. Hafer, Faith and Fitness: Diet and Exercise For A Better World (Minneapolis, MN: Augsburg Fortress, 2007), 68.

Stephen Arterburn and Linda Mintle, 29.

products. Replace mayonnaise with mustard or at least use low-fat mayonnaise. Increase vegetables, lean meats, and high-fiber fruits. Reduce junk food and/or replace it with fruit or whole grain cereal products. Go easy on dips. Have a piece of hard candy to satisfy a sweet tooth. Choose rolls over biscuits or croissants. Do not add cheese to sandwiches and save up to one hundred calories at a time. Choose salsa over guacamole. Substitute ground turkey for ground beef or mix them. After browning ground meat, rinse it in hot water to save about 160 calories per pound. Order thin crust pizza with lots of vegetables instead of meats. Use a napkin to soak any grease off pizza. For meat dishes, reduce the meat and increase the vegetables, beans, or rice.28

Many people still fail to read nutrition labels. Understanding portioning is a big problem because manufacturers may reduce the portion size to show an attractive amount of calories per serving. For instance, a serving size may contain just one hundred calories, but that serving size is a single cookie. The average person eats four or five cookies, not one.29

Eating high-fiber foods is a great way to control calories. Fiber is the indigestible portion of plant food and an important weight-loss aid because it works to slow the absorption of sugar. Found mostly in fresh fruits and vegetables, whole grains, and legumes, fiber slows down digestion, leads to feeling satisfied longer, and also decreases appetite. Fiber is not digested so the bulk it provides leaves a feeling of fullness.30

27 Ibid., 93.


29 Gregory Jantz and Ann McMurray, 63-64.

30 Stephen Arterburn and Linda Mintle, 95.
Pay attention to morning and evening eating and set some boundaries. First, eat breakfast. Trying to lose weight by skipping breakfast is a common practice and a huge mistake. Research repeatedly proves that breakfast is a key to weight control and a healthy lifestyle. Second, stop eating two hours prior to bed. This two-hour period allows enough time for digestion. The human body goes into a state of semi-hibernation during sleep and does not require as much energy. As a result, calories eaten right before bed are more easily stored as fat.

Metabolism

Metabolism generally refers to the number of calories a person burns at any given moment, regardless of whether the person is active or resting. Products that claim to boost metabolism are readily available, but they are all cons. The manufacturers of these products are trying to take advantage of the myths and misunderstandings of metabolism. Some people believe that metabolism naturally slows with age and nothing can be done about it. Others believe they will always be fat because they naturally have a slow metabolism and they may as well accept it. Tom Venuto writes that people feel better about themselves when they believe such myths. It is more reassuring and comforting to believe that genetics are solely responsible for excess body fat and that health problems have nothing to do with a lifetime of unhealthy habits. It is also more reassuring and comforting to believe that a weight-loss pill or metabolism

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32 Ibid., 167.

booster will one day be developed, providing toned, fit bodies without any work. These thoughts may be comforting, but they are not based on reality.\textsuperscript{34}

When most people talk about metabolism, they have resting metabolic rate (RMR) in mind, the number of calories a body needs to maintain its vital functions. The brain, heart, kidneys, and other organs are constantly at work, and they need energy in the form of calories to function. RMR depends primarily on a person’s fat-free mass, which includes muscle, bone, blood, organs, and tissue.\textsuperscript{35} Fat is inert. It just takes up space and does nothing.\textsuperscript{36} The more fat-free mass a person has, the more energy he will use to function. Since vital functions account for 60 - 75 percent of the total calories a person burns in a day, most calories are burned by simply staying alive.\textsuperscript{37} Muscle is the only fat-free mass that can be efficiently increased, so RMR is directly related to muscle mass: the more muscle, the higher the RMR.\textsuperscript{38}

Strength training is the most effective way to increase muscle mass, and therefore, metabolism. Forget pills, powders, books and commercials and start strength training. Another common myth is that strength training has nothing to do with weight loss, and will only result in weight gain. Some people, women in particular, avoid strength training for this reason alone. They believe that strength training will give them big, bulky muscles. It will not. Steroids have impacted the image the average person has of weight lifters. Without steroids, it is not humanly possible to look like the comic book,

\begin{footnotes}
\footnote{\textsuperscript{34} Tom Venuto, 32.}
\footnote{\textsuperscript{35} Ibid.}
\footnote{\textsuperscript{36} Carole Lewis and Marcus Brotherton, 182.}
\footnote{\textsuperscript{37} Tom Venuto, 139.}
\footnote{\textsuperscript{38} Ibid.}
\end{footnotes}
hero-like bodies that grace the cover of muscle magazines. Believing the myth and avoiding strength training is the worst thing that can happen for a lifetime of fitness. Strength training has the potential to burn as many calories as cardio, while simultaneously revving up RMR. Venuto writes, “Weight training may be the most important but underappreciated and neglected type of exercise for burning fat.”\(^{39}\)

Every added pound of muscle burns fifteen calories per day on the low end of the scale, and fifty calories per day on the high end of the scale. That increase may sound insignificant, but over the long run, the small metabolic boost that comes from added muscle is extremely significant. Using the low end of the scale, adding two pounds of muscle will burn around ten thousand calories in a year, which is enough to either lose three pounds of fat or to prevent three pounds of fat gain. If those three additional pounds of muscle are simply maintained through strength training year after year, three pounds of fat are prevented year after year. But consider the alternative: people who do not strength train to add or maintain muscle will slowly and gradually lose muscle. As they lose muscle, their metabolic rates slow down and they gain weight, even if they never increase the amount of food they eat each day.\(^{40}\)

Over a lifetime, the average person loses between 30 - 40 percent of his muscle mass, but the reason is decreased activity, not some biological mandate. Because of the decreased muscle mass, metabolism, which has been defined as the number of calories a person burns at any given moment, naturally slows. Even so, many people still believe the myth that metabolism decreases with age. The truth is that metabolism, muscle mass,

\(^{39}\) Ibid.

\(^{40}\) Suzanne Schlosberg and Liz Neporent, 136.
and exercised muscles are all connected, and that “very few people have metabolic disorders or genetic factors that cause them to be overweight.”

A final consideration for metabolism: while strength training increases it, dieting tends to decrease it. Dieting alone can reduce overall body weight, but it reduces muscle mass as well as fat. Lifting weights paired with a restriction diet will preserve muscle mass and metabolism. Most people pay too much attention to the scale, and if a diet is reducing the number on the scale, they feel that progress is being made. Many times, though, progress is being hurt. Muscle loss always reduces RMR, so muscle loss is a negative factor.

Some people have a history of sporadic exercise, recurring restriction diets, and yo-yo dieting. Yo-yo dieting is a cycle of losing and regaining weight. These people should stop focusing on weight and concentrate on developing a healthy metabolism. A healthy metabolism comes from a consistently healthy diet with an appropriate number of daily calories and a simple strength training program. Even if the initial result is a few additional pounds, do not be alarmed. Remember what Dr. Ben Lerner says: “Allow me to be unequivocal – diets don’t work. Diets may produce some results in the short term, but they have no staying power in the long term.”

Regardless of the situation, never attempt a starvation diet. The idea that eating a minimal amount of food each day will result in great weight loss is a logical one, but the

42 Stephen Arterburn and Linda Mintle, 34-35.
44 Ron Williams, 168.
45 Ben Lerner, 53.
body does not respond accordingly. When a person consumes fewer than half the number of calories his body needs to maintain its weight, his body fights back by going into starvation mode. In starvation mode, the body reduces its internal thermostat and metabolic rate. So even though a person eats less, his lower metabolic rate means that fewer calories are needed. The energy level and body temperature decreases, and fatigue increases. Then at some point, the person goes back to eating more calories, but his body is still at a reduced metabolic rate. It has a reduced ability to burn calories, so more of what he eats gets stored as body fat. And until his body recovers, he puts on more weight in the form of fat ends up in worse shape than he was before, and with less energy. Starvation mode is the human body’s attempt to preserve itself during extreme situations, and is not suited to handle normal, daily activity.\(^{46}\)

\(^{46}\) Gregory Jantz and Ann McMurray, 124.
CHAPTER FOUR

THE PASTORAL FITNESS SURVEY

Reasons for the Survey

The author of this project created an anonymous, twenty-five question survey titled, “A Fitness Model For Pastors,” and posted it online at www.freeonlinesurveys.com. Most of the questions are objective, but a few are subjective. The survey and survey results are found in Appendix One.

The survey results support research that finds the health and fitness of American pastors mirrors that of the average American.¹ To reiterate some statistics from Chapter One, nearly 65 percent of Americans are overweight or obese.² Almost 80 percent of Americans fail to meet the basic physical activity recommendations of thirty minutes of physical activity, four to five times per week. Americans spend billions of dollars every year on diets, with the total increasing yearly, but our obesity rate continues to rise every year.³ We are sicker than ever before, and poor diet and a sedentary lifestyle are largely


to blame. Approximately three hundred thousand American deaths are attributed to obesity annually.\textsuperscript{4}

One particular group of people who should take a stand against the current health and fitness problem is pastors. Pastor and counselor G. Lloyd Rediger states, “Surgeon General David Satcher has stated publicly that he believes clergy should be in the forefront of this crusade even as they were in the early civil rights movement. This fits our calling.”\textsuperscript{5} But some pastors are unable to take this stand without showing one of two things: hypocrisy, or a humble admittance of personal failure coupled with a vow to take the steps necessary for health and fitness. Joseph Christiano says, “I often wonder if leaders are aware of how much preaching they are doing – not by words, but by the actions and practices by which they live their lives.”\textsuperscript{6} Without a pastoral stand for health and fitness, Christians feel no sense of fitness urgency from their pastors and churches. David Stevens, executive director of the Christian Medical and Dental Society, writes, “A study from Purdue University showed that religious people are more overweight and out of shape than nonreligious people. Instead of reflecting the image of God, His children often look like a bunch of pot bellied Buddhas!”\textsuperscript{7}

A lack of pastoral and congregational physical fitness is more typical of some denominations than others. The same Purdue University study mentioned by Stevens found that Southern Baptists are thirty times more likely to be obese than non-Christians,

\footnote{4}{Stephen Arterburn and Linda Mintle, \textit{Lose It for Life} (Nashville, TN: Integrity Publishers, 2004), ix.}

\footnote{5}{G. Lloyd Rediger, xi.}

\footnote{6}{Joseph Christiano, \textit{My Body God’s Temple} (Lake Mary, FL: Siloam, 2004), 49.}

\footnote{7}{David Stevens, “God And Your Bod,” \url{http://newmanmag.com/display_cms.php?id=195} (accessed August 18, 2009).}
and are easily the fattest of any Christian denomination in America. Pastors need to realize that it is not normal or acceptable for pills or surgeries to be the answer for the consequence of American indulgence. They need to realize that lifestyle changes cost much less and feel much better. And after realizing these things, pastors need to live and teach them. Leadership brings greater responsibility and greater accountability. Luke 12:48 says, “But someone who does not know, and then does something wrong, will be punished only lightly. When someone has been given much, much will be required in return and when someone has been entrusted with much, even more will be required.”

Results of the Survey

The author received 392 responses from pastors, church staff members, associational directors of missions, and other ministers in all fifty states. Responders include 344 men and 48 women. Their average age is forty-four, with a high of seventy-eight and a low of twenty. Their average weight is 199 with a high of 323 and a low of 107. All but two believe God cares about our physical fitness. Only five admitted to smoking. While 237 ministers (60 percent) get a yearly physical, 155 (40 percent) do not. Three hundred twenty-one ministers (82 percent) are not being treated for high blood pressure, while 65 ministers (17 percent) are. Six ministers (1.5 percent) have high blood pressure but are not being treated for it.

Ministers were asked how many times per week they participate in cardio, strength training, and other forms of exercise or recreation, such as basketball, soccer,

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9 G. Lloyd Rediger, 16.
tennis, or playing outside with children. Seventy-three ministers do thirty minutes of cardio zero days per week, 49 do one day, 59 do two days, eighty-two do three days, 52 do four days, 56 do five days, 15 do six days, and 6 do seven days. Therefore, 31 percent do cardio one or zero days per week. The results for strength training and other forms of exercise are downhill from here. One hundred ninety ministers do strength training zero days per week, 49 do one day, 56 do two days, 65 do three days, 20 do four days, 8 do five days, 2 do six days, and 2 do seven days. Therefore, 61 percent do strength training one or zero days per week. Ninety-seven ministers do other forms of exercise/recreation zero days per week, 91 do one day, 87 do two days, 61 do three days, 21 do four days, 20 do five days, 6 do six days, and 9 do seven days. Therefore, 48 percent do other forms of exercise or recreation one or zero days per week.

Since the survey was anonymous, meaningful results depend on honesty, and honesty is a reasonable expectation of ministers. However, the subjectivity of some of the survey questions requires a proper view of reality. Responders have to be honest not only about their weight and exercise habits, but also about their physical condition. Question sixteen asks, “On a 1-10 scale, with 1 being completely sedentary and 10 being a professional physical trainer, where would you rank your level of fitness?” Shockingly, even absurdly, many ministers who admit to exercising one or zero total times per week claimed a fitness level of five or above. Comparatively, most of the ministers who are regular exercisers answered question sixteen with a seven or less. Only 35 ministers answered with anything above a seven; 31 chose eight, 4 chose nine, and none chose ten. While many of the fit are likely underestimating their fitness level because of humility, the unfit are likely overestimating their fitness level because of denial.
Question seven asks, “How would you describe your present body composition?” The answer choices are underweight, thin, athletic, muscular/running back, muscular/linebacker, a little overweight, overweight, and obese. Nine ministers admitted to being obese, 74 admitted to being overweight, and 153 claim to be a little overweight. Therefore, 236 of 392 ministers (60 percent) admit to being overweight to some degree, which will all be grouped as “overweight” from this point forward. That figure is in line with the national average of close to 65 percent.

Of the 156 ministers who did not claim to be overweight, 17 chose muscular/linebacker, 13 chose muscular/running back, 93 chose athletic, and 33 chose thin. But judging strictly from height, weight, and activity level, many of these 156 ministers have an inaccurate view of themselves. Consider the following examples: a thirty-eight year old, 5’11”, 290-pound male who does no strength training and one day of cardio per week claimed to be overweight, not obese; a thirty-five year old, 6’1”, 230-pound male who does no exercise claimed to be athletic, not a little overweight or overweight; a forty-six year old, 6’, 290-pound male who does no exercise claimed to be overweight, not obese; a thirty-two year old, 5’10”, 240-pound male who does no exercise claimed to be muscular/linebacker, not overweight; a forty-three year old, 5’11”, 255-pound male who does cardio one day per week and no strength training claimed to be athletic, not overweight; a forty-three year old, 6’, 248-pound male who does two days of cardio but no strength training claimed to be muscular/linebacker, not overweight; a sixty-year old, 5’11”, 292-pound male who does no exercise claimed to be overweight, not obese; a forty-one year old, 5’7”, 298-pound male who does no exercise claimed to be overweight, not obese. These are just a sampling of such responses.
Question fifteen asks, “Do you consider yourself to be physically fit?” One hundred ninety-one ministers said yes, 200 said no, and 1 minister did not answer. Since 236 of 392 ministers claim to be overweight, only 156 people are left that are not overweight, and that number would be smaller if some of the responders were not in denial about their body composition. Is it likely that 49 percent of the ministers surveyed are physically fit when 60 percent admit to being overweight? It is possible to be overweight and physically fit, but not likely.

The survey also reveals this negative fact: 94 (40 percent) of the 236 ministers who are overweight to some degree do not often feel guilty about their weight. This number includes 23 of the heaviest 61 ministers surveyed. When an issue is not considered a problem, change is unlikely. The positive side is that 60 percent of these 236 ministers do feel guilty for their weight, which provides some hope that they will make some changes.

In the past three years, 221 of the 392 ministers surveyed attempted a diet at least once, and 171 did not. Of the 221 ministers who did, 145 of them are currently overweight to some degree, and 76 are not. Of these 145 who are currently overweight, only 48 had positive results from their diets. Most often, regardless of how much weight was lost, most or all of the weight was regained, and a few ministers gained back even more weight than they lost. Of the 48 ministers who had positive results, a few experienced and maintained significant weight loss. Of the 76 ministers who attempted a diet and are not currently overweight, 30 had positive results, including a few that were dramatic: a forty-one year old, 5’6” female who currently weighs 156 pounds lost over one hundred pounds; a fifty-three year old, 5’9” male who currently weighs 160 pounds.
changed his diet and lost weight because he was diagnosed as a diabetic; a forty-four year old, 6’2” male who currently weighs 191 pounds lost fifty pounds because he was diagnosed as diabetic. With diet and exercise, he has reversed his diagnosis.

Question twenty asks, “If you were given a free fitness program that could be adapted to exactly where you are right now (taking into consideration your fitness level, your budget, and your access to fitness equipment), what would your interest level be (1 = no interest, 5 = sign me up)?” Fifty-eight percent of the ministers (226 of 392) responded with a four or five, while 166 ministers responded with a three or less. Seventy-two ministers who responded with a three or less are not overweight, while 94 are. Therefore, 94 out of 236 total overweight ministers have a less than enthusiastic interest for a free fitness program.

The 72 people who claim to maintain a healthy weight may have responded less than enthusiastically toward a free fitness program because they are already confident in what they are doing. This is understandable, but everyone should remember the warning of Proverbs 16:18 which says, “Pride goes before destruction, and haughtiness before a fall.” From 1991 until beginning this project in August of 2009, the author accumulated a wealth of fitness knowledge from personal trainers, doctors, experience, and reading. But while researching for this project, he discovered a wealth of new information and has implemented much of it into his own lifestyle of fitness. Regardless of whether pastors are doing sermon preparation, parenting, teaching, or exercising, there is always something more to learn and there is always someone with greater knowledge and wisdom who can help them.
Two hundred thirteen ministers would rather work out in a public gym, while 179 would rather work out at home. Question twenty-one asks, “Do you have any hesitations about going to a health club/gym? If yes, choose all that apply.” One hundred eighty-seven ministers have no hesitations, 128 do, and 77 did not respond. Cost is a concern for 175 people. Other reasons were cited. Fifty-seven ministers chose driving distance, 52 chose atmosphere, 32 chose intimidation, 26 chose embarrassment, and 10 chose a lack of fitness knowledge. Among “other” hesitations, a few ministers mentioned injuries (back, shoulder, knee), and one said multiple sclerosis, but time was listed 37 times.

Is “time” a legitimate issue? Most people make time for the things they value most. Claiming that a schedule is so full that three twenty-minute fitness sessions per week are impossible is a sign of disorganization and misplaced priorities, but the claim is also a lie. The average American watches four hours and thirty-five minutes of television per day, and that does not take into account time spent on the computer.\(^\text{10}\) People commonly claim not to have time for personal Bible reading, involvement in their children’s lives, or family vacations, but these are also lies. Laziness and/or disorganized schedules lead to other problems besides poor health and fitness. The root of the problem is never time, but how time is managed. Having better “stuff” or a nicer house may be possible with longer work hours or a more demanding job, but the calamity of that type of lifestyle is easily seen.

A home gym is the answer to most of the public gym hesitations, as well as the time excuse. With a home gym, there is no driving distance, nobody to be intimidated by

or embarrassed in front of, the atmosphere is whatever you make it, and the time involved
to make a noticeable difference is as little as an hour per week. Everyone has time for
three twenty-minute strength training sessions per week. That equals one television
drama or two television sitcoms or game shows. Furthermore, placing a television near a
home gym allows strength training to be less boring and television viewing to actually
become productive.

Question twenty-three asks, “Would you be more likely to stick with a fitness
program with a partner or on your own?” Two hundred forty-seven ministers prefer a
partner and 145 prefer to work out alone. The accountability of a partner was a common
hesitation for purchasing a home gym, but for the married, there is no better
accountability partner than the spouse. Husbands should desire fitness from their wives
and vice versa. Aside from the previously stated health and fitness benefits, strength
training can provide something that many married couples lack: a common interest in an
extracurricular activity.

A low-end Bowflex can be purchased for five to six hundred dollars, but an
excellent home gym is the Weider Max, currently available at www.walmart.com for
$277. After working out in public gyms from 1991 through 2003, the author bought an
older model of the current Weider Max in 2003 and has been using it ever since. The
space required for a home gym is roughly the corner of a bedroom. Most home gyms can
be folded when not in use to require less space.

Questions about purchasing a gym for home or church were asked. Eighty-three
people simply do not want to work out at home, 214 said the cost is too great, and 192

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said space is a problem. Regarding the churches the ministers serve or attend, 149 churches have money and space for a home gym, 132 do not, 61 have money but not space, and 50 have space but not money.

A number of ministers took the survey but also sent emails with words of approval or encouragement. A worship pastor from Alaska said, “I believe fitness is very important in the life of a minister. In my opinion, being an overweight minister is not being a good example of discipline.”  One pastor from Virginia takes fitness very seriously. He started fitness training in 2000 and believes that physical health is second only to spiritual health. To increase his learning, he even became a certified personal trainer in 2005. Other emails echoed these same sentiments, providing additional support for a program of fitness for pastors.

\[12\] Keith, e-mail message to author, January 19, 2010.

\[13\] Larry, e-mail message to author, January 12, 2010.
CHAPTER FIVE

HOW TO BEGIN A LIFESTYLE OF FITNESS

The Right Motivation

People have motivations for everything they do. Those who are always one emergency away from bankruptcy are motivated by the instant gratification of spending money, while those who purposely live with less are motivated by contentment, financial security, or the desire to be a financial blessing to others. With physical fitness, both the fit and the unfit are motivated by satisfaction. For the unfit, satisfaction comes from doing nothing, a satisfaction that is instant and brief. For the fit, satisfaction comes from the results of their efforts, even if the process is not completely gratifying. Pastors must learn that the biggest satisfaction of fitness is found in pleasing God with the care they take of their bodies.

Before pastors begin a fitness program, they should consider what God thinks about the care of the body and how it affects a person’s relationship with God. Love for God should be the motivation for fitness. Pastors should acknowledge that their bodies belong to God, and that faithful bodily care is their reasonable service to Him, an act of stewardship and worship. They should desire to serve Him at their full potential, which, in most cases, is only possible through fitness. An unhealthy, unfit body cannot tackle
the momentous challenges that God gives His servants. Life is hard, but serving God is harder.¹

The nature of pastoring demands pure motivation for fitness. Without pure motives, pastors will create stumbling blocks for themselves and for others. A better body is a possible outcome of fitness, but with impure motives, so are emptiness, arrogance, disappointment, and destruction. Pastors should desire to glorify God with their bodies, not to glorify themselves. The goal of fitness is not self-beautification.² Healthy, productive bodies come from good stewardship and bring God more glory than unhealthy and unproductive bodies that come from bad stewardship.

If God is the motivation for fitness, the results will take care of themselves. With regards to motivation, Arterburn and Mintle write, “Research tells us that people become more successful at long-term weight loss when their motivation is to become healthier, not thinner. This change in attitude or motivation is essential.”³ Although physical appearance is a strong motivator for diet and exercise in the earlier years of life, appearance alone will not motivate people into a lifestyle of exercise, healthy eating, and non-destructive habits.⁴

In Matthew 6:25, Jesus said, “Isn’t life more than food, and your body more than clothing?” While better appearance is a natural result of getting fit, appearance is a bonus, a byproduct, and should not be the goal. People who do make appearance their

goal are more likely to quit their fitness program when achieving their goal takes longer than expected. It is easy to believe the lies and exaggerations of fitness product commercials, especially when they contain emotional testimonies about incredible weight loss or physical changes. But as discussed in Chapter Two: Fitness Facts: Understanding Fitness, there are three different body types, and each type has natural strengths and limitations. When the common mistake of trying to attain a shape that is impossible for a particular body type is made, defeat is likely.

To summarize, the proper motivation for fitness is all about God. Discipline alone will not bring fitness. Obedience is required. Ben Lerner believes that obedience “is a sincere desire to do that which pleases God and supports His work here on earth and beyond. While discipline is self-motivated, obedience is inspired . . . by a love for God.”

Proverbs 16:3 says, “Commit your actions to the LORD, and your plans will succeed.”

The Right Expectations

Reality is often ignored regarding fitness and fitness products because it does not sell or excite. As a result, it is easy to think of fitness as a mythical idea instead of a true possibility. Fitness is indeed possible, even for the obese, but realistic expectations are necessary for success. One of the least popular qualities in America is required: patience.

Nothing worth having is accomplished overnight. People do not get out of shape in a week or month, and they will not get in shape or completely overhaul their bodies in a week or month, either. If it took someone two years to arrive at a certain weight and physical condition, a complete reversal could easily take that same two years, so

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expectations must be realistic. Losing thirty pounds or four dress sizes for a reunion that is just two months away is unrealistic and unhealthy, and usually ends in failure. With unrealistic goals, injury is possible, and injuries obliterate short-term goals, anyway. When people are realistic, they are more likely to enjoy getting into shape, and to enjoy the new healthy lifestyle, and that is the goal. Kenneth Cooper teaches that spiritual giants do not reach their spiritual status overnight, and with physical progress, a completely sedentary person cannot become a marathon runner in a day. He says, “Instead, after you take that first leap of faith, it’s necessary to embark on a disciplined program, which can gradually and safely turn your new, untested beliefs into a long-term reality.”

Carol Lewis and Marcus Brotherton, authors of First Place 4 Health: Discover A New Way to Healthy Living, write that Christians often look for quick solutions or miracles, expecting God to perform a miracle on their bodies. Cooper writes, “Sometimes the Lord, in His grace, does it that way. But instant divine healings are the exception, not the norm. God wants us to use all the faculties we’ve been given. He is interested in our healing, but He wants us to use our wisdom, knowledge, and skills too.” If God bailed people out of every mess they make, what incentive would they have to stop making messes? God would rather bless hard work done for His glory than urgent prayers from irresponsible people who want the benefits of an action without actually

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6 Carole Lewis and Marcus Brotherton, First Place 4 Health: Discover A New Way to Healthy Living (Ventura, CA: Regal, 2008), 204.


8 Ibid., 19.

9 Ibid., 39.
doing the action. Thomas Jefferson said, “The worst day of a man’s life is when he sits down and begins thinking about how he can get something for nothing.”

As the old saying goes, “The journey of one thousand miles starts with a single step.” Fitness is a journey that will not be accomplished all at once. It takes many small steps, and many small accomplishments. Individuals must embrace the small steps with optimism and not expect something for nothing. Results are directly proportionate to effort given.

Thinking of fitness as a goal or a resolution leads to resistance, guilty consciences, and failure. The disappointment of failing to accomplish a goal can cause a person to abandon the goal as unrealistic and impossible, while accomplishing such a goal can lead to complacency. So instead of thinking of fitness in terms of goals or mandates, think of it as a lifetime adventure. There is no deadline and no end. Every day brings new opportunities, new challenges, successes and failures, but the adventure continues.

The Right Approach

In a word, the correct way to begin a fitness program is slowly. Cooper teaches that bodies need time to become accustomed to a fitness program, and that attempting too much too soon often results in injury. The correct time to begin a fitness program for many people is immediately. According to the President’s Council on Physical Fitness

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11 Ibid., xxvi.


13 Kenneth Cooper, 67.
and Health, a person in good health and under thirty-five can begin exercising without seeing a doctor first. Those above thirty-five and inactive should see a doctor first.\textsuperscript{14}

Although the approach to fitness seen on NBC’s \textit{The Biggest Loser} is great for ratings, it is not great for the body or for sustained fitness. Fitness is not a competition. Health, strength, endurance, and weight loss cannot be healthily attained in short amounts of time. \textit{The Biggest Loser} approach is all about drama, and it is completely wrong. Obese, unfit people should not try to run a mile on the beach or be thrust into an intense strength training program. While this approach does produce some shocking results within a few months, the show also reveals that former contestants often relapse after leaving the competition. Fitness is not a competition, but a lifestyle. The methods used on the show are not sustainable in most real life situations. A person sincere about getting fit and staying fit is on a journey, not in a race. A slow approach to fitness is the most effective, healthy, and sustainable approach.

Why is high-intensity training not the way to start? The body must be prepared to handle the stresses of exercise. Starting too fast or hard not only causes Delayed Onset Muscle Soreness (DOMS), but can also cause injury and halt a fitness program before it really gets started.\textsuperscript{15} DOMS is the pain and soreness that occurs twenty-four to forty-eight hours after exercise. The soreness can be so severe that performing normal daily activities becomes difficult and painful. “No pain, no gain” is a popular phrase, and to a degree, it is right. But exercise should not put people out of commission for a week.

DOMS occurs due to microscopic muscle damage, the tiny tears that occur in muscles when they are worked beyond normal capacity. DOMS normally lasts for three

\textsuperscript{14} Stephen Arterburn and Linda Mintle, 117.

\textsuperscript{15} Ibid., 146.
to four days, but often reaches its peak after forty-eight hours. Icing the affected areas can help reduce some of the soreness.\textsuperscript{16} DOMS is much less severe after exercise becomes regular, and has no effect on daily activities.

With a slow approach, DOMS does not even have to be an issue. When the muscles and connective tissues are slowly prepared for more intense training with four to six weeks of light training, they respond much less severely, even with little or no soreness at all. This easy beginning is known as the preconditioning phase, and even people with previous fitness experience should start off slowly after an extended layoff. DOMS is possible even when dedicated lifters take two weeks off. The preconditioning phase gradually exposes the body to training stress so that soreness and risk of injury are minimized. Only one set with light weight is performed for each exercise.\textsuperscript{17}

People often skip the preconditioning phase because of embarrassment, and choose to deal with DOMS rather than look weak. But anyone in a gym who really knows what he is doing will appreciate seeing a beginner start properly; and furthermore, the concern should not lie with what other people think. The question must be asked, “Am I trying to prove something to people, or am I trying to honor God with my body?” The preconditioning phase prepares people’s bodies for the stresses of lifting to maximum potential, and their bodies will reward them for being patient. An “all or nothing” approach is not only juvenile, but counterproductive. Injuries limit or prevent exercise.

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\textsuperscript{16} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, \textit{The Complete Idiot’s Guide To Weight Training}, 3\textsuperscript{rd} ed. (Indianapolis, IN: Macmillan USA, Inc., 2001), 210.

\textsuperscript{17} Tom Venuto, 176.
\end{flushright}
After completing the preconditioning phase, intensity in line with the individual’s capacity can be added. Exercise should begin at the current level of fitness increase in intensity as fitness improves. Any exercise that causes pain, particularly with previous injuries, should be avoided.\footnote{Ibid., 150.} Dr. Ben Lerner has trained American athletes for and during the Olympics. He has observed that the people who always train to the extreme normally see a season, a career, or their life cut short due to a physical breakdown of the parts of their bodies they have been abusing or because of emotional burnout. God created exercise, and “exercise by God does not cause physical or emotional damage or destruction; it causes physical and emotional construction or reconstruction.”\footnote{Ben Lerner, 148.}

Previous fitness discouragements or a lack of fitness experience is no source of worry. Use the basic information found in this project and get started. Everyone fails, but the biggest failures never get started. Through time, fitness will come. And when the goal is to honor God, every small step accomplishes the goal.\footnote{Ibid., 211.}

**The Right Attitude**

The basic lifestyle change that jumpstarts fitness is movement. There are many ways to increase movement, and each one is a step in the right direction. As discussed in Chapter One, Americans have created a lifestyle that opposes movement. They love remote controls, drive-through service windows, and all kinds of automation.

\footnote{Ibid., 150.}
\footnote{Ben Lerner, 148.}
\footnote{Ibid., 211.}
Comedienne Roseanne Barr has famously said that she will not use a vacuum cleaner until Sears makes one she can ride on.\textsuperscript{21} Americans avoid movement.

Increasing movement means getting rid of excuses, and attitude is a large part of the battle when it comes to developing a lifestyle of fitness. Arterburn and Mintle write, Whatever reasons you have used for avoiding exercise in the past – it’s unpleasant, too painful, inconvenient, frustrating, or too time consuming – the reality is that exercise is necessary if you are serious about being healthy. Regardless of your past experiences, regular physical activity is essential for weight control and developing a healthy lifestyle.\textsuperscript{22}

Everyone has twenty-four hours per day to manage, and when fitness is suffering, management style must be changed and excuses must be eliminated.

Fitness does not mean individuals must give up all the foods they love. A healthy diet can include foods like pizza, chocolate, burgers, and ice cream as long as they are eaten in moderation. Restaurant food is not taboo. Healthy eating is possible at just about any restaurant, even fast food restaurants. Food selection and portion control are the keys. The only absolute is to regularly burn more calories than are eaten.\textsuperscript{23}

Fitness does not mean living in the gym. Some people think life is too short to be in the gym all the time, and that fitness requires missing out on too many relationships and fun things. However, people will live shorter and less enjoyable lives if they do not take care of themselves. They will also limit their ability to take care of loved ones. Furthermore, an effective fitness program can be done in three twenty-minute sessions.


\textsuperscript{22} Stephen Arterburn and Linda Mintle, Lose It for Life (Nashville, TN: Integrity Publishers, 2004), 118.

\textsuperscript{23} Tom Venuto, 48-49.
per week, so it does not kill family or social time. Some people find that getting fit opens the social life, because of new friendships formed at the gym.\textsuperscript{24}

Injuries are also commonly excuses for not getting fit. Having an injury does not mean a person cannot do a fitness program, it just means that he will have to work around the injury and do what he is capable of doing. Fitness with injury may be more challenging, but it is not impossible. Anyone tempted to use an injury as an excuse should remind himself of the feats of Special Olympians. Usually it is not that a person cannot do something, but that he will not.\textsuperscript{25}

Some lifestyle changes are rejected because they require more time, but with proper priorities, lifestyle changes that promote fitness fall neatly into any schedule. Exercise or lifestyle changes may initially cut into sleeping time, but since exercise increases energy level, any time spent on exercise is a wise investment. Reaping the energy benefits of exercise requires a down payment of time and energy, which most unfit people are not or have not been willing to make.

Lifestyle changes can make a noticeable difference in fitness over time, even if they are added one by one. It is not wise to avoid steps that promote fitness because they cost time. Time should be set aside for fitness. Everyone can compile a list of changes unique to their location and environment. The following are basic changes anyone could make: take the stairs instead of the elevator or escalator; park far away from store entrances unless safety is a question; walk around the airport during layovers or while waiting for departure; when using public transportation, get off one stop early and walk the last part of the trip; walk the dog; instead of paying others for car washing, house

\textsuperscript{24} Ibid.

\textsuperscript{25} Ibid.
cleaning, or lawn care, do the work yourself. All of these practices help to create a lifestyle of fitness by encouraging movement, and they carry over to other areas that can be added as they are recognized. Additionally, they teach children to look for ways to increase movement instead of ways to avoid it. They also offer the satisfaction of a job well done. Not wanting to mow the lawn, clean the house, or wash the car can be overcome with a change in attitude, but a lifestyle or schedule that is so out of control that basic, domestic chores must be hired out or left undone is a much bigger problem to correct.

As mentioned in Chapter Four: The Pastoral Fitness Survey Results, an easy change that increases movement and fitness level is coupling television time with workout time. A person who owns a home gym or some type of cardio machine (treadmill, elliptical, etc.) is set. Otherwise, Chapter Seven: The Execution of the Fitness Program will explain how to do strength training at home, without the cost of a home gym. Therefore, even those with financial or space restrictions have a cost-friendly way to exercise while watching a favorite show. In fact, coupling these two activities is the best of both worlds for people who cling to their television time. Instead of television getting in the way of fitness, it can actually encourage it. The workouts will go by quicker, especially the typically boring cardio workouts. After combining exercise and a favorite show a few times, an association between the two will develop.
Many people strictly think of cardiovascular exercises like jogging when they think of exercise; however, fitness involves three active components: strength training, cardio training, and flexibility training. Fortunately, all three components can be combined into a single fitness program. This chapter will examine each component and define some important exercise terms.

**Strength Training**

Of the three components of the fitness program, strength training is placed first because it is the most important. This comes as a shock to many people and it contradicts the picture in most fitness facilities: far more people doing cardio than strength training. Cardio exercises like walking and jogging do not work to accomplish the muscular conditioning the body needs. Exercise biologist and nutritional biochemist Dr. John Barardi has stated that people who do cardio but no strength training can expect to lose strength, gain fat, struggle with lower-back pain, and eventually become more reliant on others for physical tasks. Cardio serves a purpose, but strength training is the key to preserving bone, joint, and muscle and to remaining lean, strong, and resilient through the
aging process.\(^1\) Cardio exercises are simply unable to match the benefits of strength training, so if a person is only going to do one type of exercise, strength training should be the choice.\(^2\)

Strength training, also known as weight lifting and resistance training, is applying resistance against the bones, joints, and muscles. Resistance creates microscopic tears in the muscle tissue. The tearing of the muscles forces the body to repair itself. Continuously repeating this process causes the bones to become denser, the connective tissues of joints to become stronger, and the muscles to increase in size and strength.\(^3\)

When muscles are not used, they atrophy, or go away. Within as little as forty-eight hours after performing strength training exercise, the muscles that were worked begin to atrophy, getting microscopically smaller and weaker. God has designed man so that he must consistently apply some kind of resistance to his muscles.\(^4\) Popular strength training methods include body weight, resistance bands or tubes, any weighted object, resistance rod technology, and free weights.

Strength training is anaerobic, which means “without air.” Intense, short-duration exercises like weight lifting or sprinting are anaerobic.\(^5\) Anaerobic exercises are not endurance exercises. They require maximum effort, which can be sustained for only short periods of time. Attempting to lift a maximum weight for an exercise will normally


\(^{5}\) Ibid., 166.
result in zero, one, or two repetitions. Sprinters run short-distance races because they can run at maximum capacity for only a matter of seconds. The longest Olympic sprint is four-hundred meters, and the world record is under forty-four seconds.6

Common thinking is that strength training is for bulking up, not losing weight, but this common thinking is wrong. Strength training is actually the best way to control body weight, as is discussed in Chapter Three: The Connection Between Fitness and Diet.7 Strength training can cause increased body weight, but it improves body composition at the same time, resulting in a leaner, stronger, more athletic appearance. Convincing weight-focused people that it is alright to gain weight as long as it is in the form of muscle is very difficult. Some people who desperately need to lose weight abandon their biggest ally.8 Weight loss centers do the same thing, even though they understand the benefit of strength training. These centers have ulterior motives when they instruct their clients to stick to cardio; they promise that clients will lose a certain amount of weight by following their program, and they know that strength training may offset any fat loss with muscle gain. Instead of doing what is best for their clients, they do what is best for business.9

As mentioned in Chapter Three: The Connection Between Fitness and Diet, some people, particularly women, avoid strength training because they fear it will give them big muscles and dramatically alter their shape and appearance. While strength

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8 Tom Venuto, 158-159.

9 Ibid.
training will reshape the body, it will only produce dramatic muscular changes if heavy weights are used over a long period of time by people who have a natural propensity to add muscle. Lean muscle takes up less space than fat, so through strength training, most people actually decrease their actual body size in inches, even though they add muscle and even body weight.10

A little logical reasoning will also squash the myth that strength training automatically results in bulky muscles. People who have been lifting weights for years only increase their muscularity to a certain degree. Twenty years of weight lifting does not automatically translate into a hulking body. Each body has natural limitations, which is why steroids are so common in sports at all levels: they allow a body to exceed its natural limitations.

**Cardiovascular Training**

Cardiovascular means “of the heart” and involves the heart, lungs, and blood vessels. Cardiovascular training is also known as aerobic training or aerobics. Aerobic means “with air.” Aerobic exercise is any repetitive activity done long enough and hard enough to challenge the heart and lungs.11

While cardio training has less impact on body composition than strength training, it is still important because it conditions the heart and lungs.12 Cardio exercises increase the amount of blood the heart pumps through the body and brings in more oxygen. Weak

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10 Carole Lewis and Marcus Brotherton, *First Place 4 Health: Discover A New Way to Healthy Living* (Ventura, CA: Regal, 2008), 182.

11 Suzanne Schlosberg and Liz Neporent, 78.

12 Ben Lerner, 149.
hearts have to beat more times to get enough oxygen to the body, so improving heart and lung capacity reduces the work of the heart and lungs and prolongs life.\textsuperscript{13} Cardio exercises include jogging, walking, swimming, and cycling, or using gym equipment like treadmills, step machines, and elliptical machines. High-energy sports like boxing, basketball, tennis, racquetball, and soccer also have cardio benefits.\textsuperscript{14} All aerobic exercises engage the large muscles, including the buttocks, legs, back, and chest.\textsuperscript{15}

Home cardio equipment does not have to cost hundreds of dollars. A mini-trampoline provides a great cardio workout, especially when exercise is done in short intervals and in combination with a strength training routine. As of April 3, 2010, a thirty-six inch diameter trampoline can be purchased at WalMart for $34.77.\textsuperscript{16}

One can improve his aerobic capacity by following three fundamental guidelines. First, it is critical to work hard enough to produce results without overdoing it. Remember, the whole idea of any aerobic exercise is sustaining the exercise. Each person has an aerobic capacity, and if a person exceeds his capacity, he will have to slow down or stop to catch his breath. Optimum intensity level is seventy to eighty-five percent of maximum ability, which would be realized with a sprint. But working up to that maximum takes time.\textsuperscript{17}

\begin{itemize}
\item \textsuperscript{13} Carole Lewis and Marcus Brotherton, 184.
\item \textsuperscript{14} Tom Venuto, 143.
\item \textsuperscript{15} Suzanne Schlosberg and Liz Neporent, 78.
\item \textsuperscript{17} Richard Laliberte and Stephen C. George, \textit{The Men’s Health Guide to Peak Conditioning} (Long Island, NY: Hatherleigh Press, 2004), 27.
\end{itemize}
A “talk test” is a simple way to determine if the intensity level of the cardio is great enough. Easily speaking in complete sentences means increase the intensity. Not being able to combine three words means decrease the intensity.\textsuperscript{18}

The second fundamental guideline is duration. To qualify as a sustained activity, an aerobic workout should last at least twenty minutes. Exercising longer than thirty to forty minutes usually decreases the effectiveness because intensity decreases. Instead of increasing the duration, it is better to increase intensity, and work harder for twenty or thirty minutes. Fortunately for beginners and for anyone who wishes to combine cardio with strength training, significant aerobic benefits come from several shorter cardio sessions. Instead of one twenty-minute session, four five-minute sessions bring similar health benefits. Multiple short sessions will not turn a person into a marathon runner, but heart health is a more popular and beneficial goal than marathon running.\textsuperscript{19}

The third fundamental guideline is frequency. The key for each person in answering the question of how often to do cardio training is current condition. Completely sedentary people will benefit just by getting started. More active people should set a target of three cardio sessions per week. Several studies state that more than three cardio sessions per week provide no additional cardiovascular benefit. Therefore, the goal should be to do enough to reap the cardiovascular benefits, but not any more.\textsuperscript{20} Additional exercise time is better used by strength training, but as long as the strength training minimum is met, the best advice is to use any additional exercise time on what is

\textsuperscript{18} Suzanne Schlosberg and Liz Neporent, 76.

\textsuperscript{19} Richard Laliberte and Stephen C. George, 28.

\textsuperscript{20} Ibid., 28-29.
most enjoyable. The time of year has something to say about which type of exercise is more enjoyable for some parts of the United States.

When cardio and strength training are done separately in the same workout, strength training should come first. The simple reason is that doing cardio first will use too much energy for strength training to be effective. Tom P. Hafer gives the complex reason in *Faith and Fitness: Diet and Exercise For A Better World*:

The body uses its energy sources differently. The quickest and strongest muscle contractions use sugar as an energy source. Weight lifting burns plenty of sugar or glucose because of the short duration and explosive nature of the exercise. Intense weight lifting is performed without oxygen (anaerobic).

When beginning an exercise, muscles are powered almost exclusively by the immediate energy source, glucose. If exercise continues, the body will start demanding oxygen. If the exercise does not become too intense for regular breathing, oxygen can be supplied through the bloodstream and an aerobic exercise can continue.

During heavy weight lifting, the exercises are too demanding to supply oxygen to the muscle that is being worked. A burning sensation in the working muscle occurs when the muscle begins to fatigue. The burn is caused by lactic acid. This acid is a by-product of glucose burned without oxygen. This is a normal and necessary chemical reaction when weight lifting. For maximum results from weight lifting, it is important to feel the burn. Over the course of a workout, as sugar (glucose) becomes less readily available, a maximum muscle contraction becomes more difficult. Weight lifting is most efficient when sugar (glucose) is at its peak, that is, at the beginning of a workout routine . . . Simply put, weights done prior to aerobic activity will best utilize your body’s natural sugar (glucose) storage. Fat burns nicely with oxygen. So when it is time for the aerobic portion of your workout, you will be further along into your body’s natural fat storages. Also, aerobic exercise assists in the removal of lactic acid that is built-up from weight lifting by flooding the muscles with fresh oxygenated blood. This reduces the potential for ongoing muscle soreness.\(^{21}\)

### Flexibility Training

Flexibility refers to the range of motion of a joint, that is, how far the joint can move, and how easily the joint moves. Since muscles attach to joints and are responsible

for moving the joints, flexibility also refers to the mobility of muscles. Flexibility is improved by stretching. Greater flexibility improves blood flow, range of motion, athletic performance, speed, and strength, which results in fewer injuries and falls. Greater flexibility also makes daily activities easier, like reaching into the back seat of a car, reaching for a top shelf, or bending over for a basket of laundry. The act of stretching prevents exercised muscles from getting tight, relieves tension and stress, and can be performed just about anywhere.

As with strength and endurance, anyone can improve their flexibility. All that is required is getting started and following some basic rules. First, warm up muscles before stretching them. Cold muscles are stiff and pull or tear easier. Warming up muscles can include walking, jogging, or light strength training exercises like body weight squats or lunges.

Second, stretching should be done often, daily if possible. Every workout should include stretching, but two other great times to stretch are just before bed and while watching TV. Third, move into each stretch slowly. Never force a stretch. Fourth, notice the amount of tension a stretch provides. Flexibility improves with stretching, so when tension lessens, deepen the stretch. Tension should range from mild to slight discomfort on the pain meter, but should never cause sharp pain in any part of the body. Fifth, each stretch should be held for a minimum of ten seconds, with no bouncing. Bouncing tightens muscles and can tear them. Sixth, while holding each stretch, take two or three deep breaths. Deep breathing promotes relaxation.

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23 Carole Lewis and Marcus Brotherton, 130.

24 Richard Laliberte and Stephen C. George, 32.

25 Suzanne Schlosberg and Liz Neporent, 222.
Most people are familiar with the rule to warm up before exercise, and the common assumption is that warming up means stretching. The first rule of stretching is to warm up prior to stretching with walking, light jogging, or body weight exercises. Stretching without warming up can easily result in torn muscles, ligaments, and tendons.\textsuperscript{26} Much like rubber bands, muscles are more likely to tear when they are cold. Sixty percent of all physical training injuries happen during the first ten minutes of exercise.\textsuperscript{27}

**Partner Up**

Working out with a partner can provide accountability, but personality often determines whether partnering up or going solo is best. When unsure, try both and see which option works best. Ecclesiastes 4:9-12 says, “Two people are better off than one, for they can help each other succeed. If one person falls, the other can reach out and help. But someone who falls alone is in real trouble. Likewise, two people lying close together can keep each other warm. But how can one be warm alone? A person standing alone can be attacked and defeated, but two can stand back-to-back and conquer.”

The reinforcement that partners provide can be either positive or negative. If a partner hurts consistency and motivation instead of helping it, go solo or quickly find a new partner. Over time, many veteran exercisers learn that they are better off on their own. All obstacles of working out alone, such as never having a spotter, can be

\textsuperscript{26} Kenneth Cooper, 68. 

\textsuperscript{27} Ron Williams, 210.
overcome. For instance, to work out alone, simply choose exercises that do not require a spotter.

When pastors partner with fellow Christians, two-way Christian accountability is also possible. Proverbs 27:17 says, “As iron sharpens iron, so a friend sharpens a friend.” Working out with an unbeliever provides a great opportunity for pastors to share Jesus with a person they already have a relationship with, and also, to gain insight into what unbelievers think about Jesus, Christians, and the church.²⁸

How to Pick A Gym

For everyone who chooses to work out in a gym rather than at home, four important factors should be considered. Just as with real estate, location is the most important factor. Ideally, the gym should be close to home or work. Choosing a gym that is too far out of the way hurts exercise consistency. Remember that workout time is increased by the commute. Paying more for a membership at a better location is worth the time saved.²⁹

Second, personality and attitude must be compatible with a gym’s style. Some gyms play loud music of a particular genre, and music generally sets the tone for clientele and atmosphere. Audible atmosphere can be overcome with portable music players, but visual atmosphere cannot be overcome. Some gyms serve as much as singles clubs as

²⁸ Kenneth Cooper, 29.

they do fitness facilities. Many cities have gender-specific gyms and YMCA’s, and some larger churches have fitness centers with memberships available.\(^\text{30}\)

Cost is the third factor. Some gyms offer a variety of payment packages, and others offer memberships based on amenities chosen. A discount may be available for paying for a year in advance. Before signing any contract, carefully review the terms.\(^\text{31}\)

Also, consider the total amount of a gym membership over the course of a year, not just the monthly payment. Often, a home gym can be purchased for the cost of a single year of gym payments. The author paid $550 for a home gym in September of 2003. It is still in excellent condition after six and a half years of regular use, and he has not paid a cent to a gym in all that time.

Forth, consider the extras. Is childcare available? Is it free? Are any personal training sessions included? Are there any special classes or training? Are showers available, and if so, are they well-maintained? Is the exercise equipment clean and orderly? Is the staff friendly, helpful, and competent? The extras matter, and when there are several gyms in one area, compare the extras and use them to bargain for a better price. Competition normally means a better deal.\(^\text{32}\)

**Definition of Fitness Terms**

**aerobic.** Longer duration exercises done “with air” that elevate breathing and heart rates and benefit the complete cardiovascular system.\(^\text{33}\)

\(^{30}\) Ibid.

\(^{31}\) Ibid.

\(^{32}\) Ibid.

**anaerobic.** Shorter duration exercises done “without air” that are primarily aimed at increasing muscle strength and size.\(^{34}\)

**circuit training.** Moving rapidly between the different exercises of a routine with the goal of an anaerobic workout that provides aerobic benefits.\(^{35}\)

**concentric contraction/positive.** The lifting of weight during a rep, as the targeted muscle(s) is shortened.\(^{36}\)

**eccentric contraction/negative.** The lowering or releasing of weight during a rep, as the targeted muscle(s) is lengthened.\(^{37}\)

**failure.** For any given exercise, performing reps until another rep is not possible.\(^{38}\)

**free weights.** Weights, such as barbells or dumbbells, that are not attached to another structural device and are raised or lowered by the hands and arms.\(^{39}\)

**full-body routine.** Working every muscle group in the same workout. A complete routine is normally performed at three or more days per week.\(^{40}\)

**intensity.** The amount of resistance for a given exercise. Intensity can be increased by adding weight or repetitions, reducing the time between sets for strength training exercises, and by increasing speed or time during cardio exercises.\(^{41}\)

**isolate.** To target a specific muscle for a given exercise, usually an exercise that uses just one joint for movement.\(^{42}\)

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\(^{34}\) Ibid.

\(^{35}\) Ibid.


\(^{38}\) Ben Lerner, 168.


\(^{41}\) Ben Lerner, 168.

**max.** The maximum amount of weight that can be lifted one rep.

**momentum.** Allowing the laws of physics to assist in the lifting of a weight during an exercise, rather than lifting the weight with a controlled tempo where the targeted muscles must do all the work. 43

**plateau.** A point where exercise performance or muscle strength and size slows or stops, indicating that a change in routine is necessary for continued progress. 44

**progressive overload.** Making muscles do work they have never done before in order to promote progress. Without progressively overloading muscles, they will plateau and stop increasing in size and strength. Progressive overload is accomplished by using more weight, performing more reps, resting for less time between sets, changing exercises for a muscle group, or changing the order of exercises for a muscle group. 45

**repetition (rep).** Performing an exercise one single time. Bench pressing a barbell five times means five reps. 46

**resistance band.** Long rubber bands or tubes, sometimes attached with handles on each end, which are used to perform strength training exercises. Bands are of varying thickness to provide different levels of resistance. 47

**resistance rod.** Long, nylon rods of various diameters used for resistance in some home gyms. Resistance rods replace free weights and weight stacks.

**routine.** The group of exercises performed on a given day. A complete fitness program can be performed in one session, or in multiple sessions over the course of several days, with different muscle groups targeted each day. An example is a chest and triceps routine. 48

**set.** One group of repetitions for an exercise. Doing five bench presses three different times means three sets.

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43 Ibid.
44 Ibid.
45 Tom Venuto, 165.
46 Ben Lerner, 168.
set x rep. Workouts commonly list sets and reps for each exercise with the number of sets x the number of reps. For example, 3 x 10 means three sets of ten reps.49

split routine. Splitting a fitness program into several routines over several days with different muscle groups targeted each day.50

spotter. A person who assists, helps, or watches someone who is performing a strength training exercise. A spotter helps prevent accidents and injuries, but also makes progressive overload possible for heavy exercises by assisting lift the weight if the lifter fails.51

superset. Immediately performing one exercise right after another.52

tempo. The rate of speed in which reps are performed.53

warm up set. For any given exercise, a set performed with light weight before work sets to warm up the targeted muscles and to prevent injury. Warm up sets are not counted in the total number of sets.54

work set. Each group of repetitions for an exercise, not counting the warm up set.55

49 Ibid.


52 Ibid.

53 Ibid.

54 Ibid.

55 Ibid.
CHAPTER SEVEN

THE EXECUTION OF THE FITNESS PROGRAM

Proper Form and Procedure

There are four basic rules for safe strength training, and a look around any gym reveals that these rules are often ignored. First, each joint structure has its own rotation and limitations, which must not be exceeded. Second, each exercise movement must be consistent and controlled. Jerky movements can cause injury. Third, each exercise should be performed with a slow, consistent increase in tension. Attempting to blast or force through a movement can cause injury. Fourth, all strength training should be done with complete alignment and balance. If an exercise causes a compromise of such posture, too much weight is being used, and injury is likely.¹ The authors of The Complete Idiot’s guide to Weight Training stress that

proper technique is the key not only to making solid strength gains, but also to maintaining health over the long term. Generally speaking, using good form means lifting less weight than you might think you’re able. Proper form requires you to isolate the muscle or muscles you’re trying to build, which makes the exercise harder to perform…the actual amount of weight you lift is in many ways insignificant. Instead, what’s important is how you lift that weight.

¹ Ron Williams, Faith and Fat Loss (Salt Lake City, UT: RTW Publishing International, LLC, 2008), 204.
Remember that you're lifting to improve your body and mind, not to pump up your ego. Lifting slowly through a full range of motion is your ultimate goal.²

Proper form for each exercise will be given, but there is a basic posture for all standing and seated strength training exercise, and for lifting a weight off the floor. The correct posture for any standing exercise is to stand against a wall with the back of the head and the buttocks flush against the wall. Take one step forward and tighten the abdominals while keeping the buttocks in the same position they were while touching the wall. This proper alignment will allow the abdominals to protect the back. Bad posture can cause back injuries over time, but bad form while strength training can quickly cause back injuries.³ The correct posture for any seated exercise is to sit up with a straight back and tight abdominal muscles. The correct posture when picking up any weight is to bend from the hips and knees, not the back. All of these postures are easily learned and executed as long as there is not an attempt to use too much weight.⁴

After the preconditioning phase, where very light weight is used for each exercise to prepare the body for more rigorous strength training, choosing the right amount of weight is easy. For any exercise, if the weight is too heavy to complete a set of the required number of repetitions, lower the amount of weight. If the full number of repetitions is easy to complete, increase the amount of weight. Completing the last repetition of a set should be challenging. A slight burning sensation in the muscles


³ Ibid., 75.

⁴ Ibid., 78.
worked should be felt, but not pain. Pain reveals that the intensity is too great. If
repetitions for an exercise are not stated, a good rule of thumb is eight to ten repetitions.

Perform every strength training exercise slowly and under control. Count to three on
the positive phase, pause for one second, and count to three on the negative phase.
Cheating by swinging the weight means the specific muscle group is not being targeted,
and it also puts undue stress on the various joints involved in the exercise and can lead to
injury. Breathe out as the weight is lifted (concentric contraction or positive), and
breathe in as the weight is lowered (eccentric contraction or negative). It is generally
easier to lift weight improperly. Enlisting other muscles and using momentum makes lifts
easier, but at the cost of safety and effectiveness.

Many people forego a routine and rather focus on the exercises or body parts they
like best, but it is a necessity to train all the major muscle groups and to train them in the
proper order. There are guys at just about any gym with large chests and skinny legs
because they never work their legs. Such unsymmetrical bodies are not only odd looking,
but unbalanced and unfit. A fit body is one in which every muscle group is targeted.

The big muscles should be worked before the smaller, complimentary muscles
because the smaller muscles tire quicker and will limit the intensity with which the bigger
muscles can be worked. For instance, working the back involves the biceps, so the back

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5 Joseph Christiano, My Body God’s Temple (Lake Mary, FL: Siloam, 2004), 163.
7 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 78.
9 Ibid.
should be worked before the biceps.\textsuperscript{10} This project gives the proper order for performing all exercises, eliminating worry and confusion.

**Muscle Groups and Corresponding Exercises**

I. Legs and Leg Exercises

The leg muscles are the largest group of muscles in the body and the most important muscles for mobility.\textsuperscript{11} Having strong leg muscles is key to injury prevention in sports as well as regular, daily activities. Strong legs protect the hips, knees, and ankles from a lifetime of stress, whether running, jumping, or going up and down stairs. Nevertheless, even among weight lifters, legs are the most neglected muscles.\textsuperscript{12} As people age, having strong legs is important for balance, walking moderate to long distances, and moving from a sitting to a standing position. Regardless of age, limited mobility is due primarily to weak legs.\textsuperscript{13}

The primary muscles of the legs are the gluteus maximus (glutes), hamstrings, quadriceps (quads), and calves. The glutes are a wide band of muscles that cover the entire buttocks area. They extend the legs from the hips when the legs are bent, so they work during walking, running, jumping, or sitting, all the time except while lying down.\textsuperscript{14}

The upper legs are made up of the hamstrings and the quads. The hamstrings make up the back of the upper legs. They are made up of three muscles that work

\textsuperscript{10} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 83.

\textsuperscript{11} Ibid., 91.


\textsuperscript{13} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 93.

\textsuperscript{14} Ibid., 91
together to extend the legs from the hips when the legs are straight, and to bend the lower
legs from the straight position. The quads cover the entire front part of the upper legs.
They are made up of four muscles that work to straighten the lower legs from a bent
position. One of these muscles, the rectus femoris, crosses the hip joint and works to
bend and flex the hip.\textsuperscript{15}

The calves are a set of three muscles, the gastrocnemius, the soleus, and the
tibialis anterior. The gastrocnemius is the muscle in the back of the lower leg, and it
raises the heels.\textsuperscript{16} The soleus is deeper than the gastrocnemius and works when the knees
are bent and the heels are raised off the floor. The tibialis anterior is the muscle in the
front of the lower legs, and it lowers the heels below the toes or raises the toes off the
floor.\textsuperscript{17}

A. Squat (Figures 7.1a, 7.1b) - Squats are the standard of all leg exercises, but
they are beneficial to the whole body because all the major muscle groups join
forces to execute the lift. Squats primarily develop the quadriceps, but they also
work the hamstrings, glutes, and the calves.\textsuperscript{18} They require more energy than any
other lift and should be performed first. Attention must be given to strict form,
and there must be no attempt to lift more weight than can be handled. Squats
strengthen the entire body and make all physical activities easier. Even the

\textsuperscript{15} Ibid.

\textsuperscript{16} Steve Leamont, \textit{Muscle in Minutes: The Insiders’ Guide to Body Building With Negative

\textsuperscript{17} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 92.

\textsuperscript{18} James Villepigue and Hugo Rivera, 102.
elderly can perform lightweight or body weight squats, which will improve overall strength and mobility.

Squats can be performed in several different ways, and two will be given. First is the barbell squat, which requires a squat rack. Place the barbell at about chest level, the head and neck in front of the bar, and position the bar across the back of the shoulders. Feet should be spread slightly wider than shoulder width. Lift the barbell off the rack and take a step backwards. With toes pointed slightly outward, keep the back straight and squat at the knees until thighs are parallel to the floor. The back will arch inward slightly. Return to the starting position. The head should face the sky, abdominals should be tight, and weight should be kept on the heels. Do not lean forward, allow the knees to travel past the toes, place the bar across the neck, or squat without a spotter or safety rack. Second is the dumbbell squat, which is performed by holding dumbbells beside or between the legs or at shoulder level. Heavy dumbbells are easiest held between the legs. Do everything else the same as with the barbell squat.

B. Lunge (Figures 7.2a, 7.2b) - Lunges use the same muscles as squats, except that they work the hip flexors harder. The tighter and weaker the hip flexors, the harder it is to jump or take long, forward or diagonally steps, as with avoiding objects. Since one leg at a time is worked, not nearly as much weight is required, but more concentration and balance are.

Lunges primarily work the glutes, hamstrings, and quads, while secondarily working the calves. They make all lunging, jumping, running, and

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19 Ibid., 94-95.

20 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 96.
striding actions easier, and they also improve balance. When our strides get shorter, the less mobile and agile we become. For the elderly, lunges help prevent falls.\textsuperscript{21}

Lunges can be performed several different ways, and two will be given. First, dumbbell lunges are performed by holding dumbbells at to the sides. Take a long step forward until the rear knee nearly touches the ground. Then, push off with the front leg and step back to the starting position. Repeat the move with the other leg. While performing the lunge, keep abdominals tight, the back straight, and do not lean forward or let the knee pass the toes in the lunged position.\textsuperscript{22}

Second, barbell lunges are performed with a barbell across the back of the shoulders. Do everything else the same as with dumbbell lunges.

C. Leg Press (Figures 7.3a, 7.3b) - The leg press requires a machine, and can be used in place of squats for those who are unable to perform them, or as a supplement to a heavy leg routine. The leg press works the same muscles as the squat, but unlike the squat, it allows safe working of both legs even while using a lot of weight.\textsuperscript{23}

To perform the leg press, sit on the machine with the back on the support and spread the feet evenly across the platform. Keeping the back flush against the back pad, press forward, release the lever handles, and slowly lower the sled until the knees are bent to ninety degrees or until the back tries to lift off the seat. Pause and slowly return to the starting position. While performing the leg press,

\textsuperscript{21} James Villepigue and Hugo Rivera, 108.

\textsuperscript{22} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 96.

\textsuperscript{23} James Villepigue and Hugo Rivera, 110.
keep abdominals tight and the weight on the middle to heel of the feet, not the toes. Do not lock out or snap the knees at the top of the movement, arch the back, or allow the buttocks to lift off the seat. Higher foot placement equals less intense quad contraction and less knee involvement. Lower foot placement equals more intense quad contraction, but also, more stress and force on the knees.  

D. Leg Extension (Figures 7.4a, 7.4b) - The leg extension is an isolation exercise that targets the quadriceps and it also strengthens the knee. Leg extensions are usually involved in knee rehabilitation, and the exercise can be done one leg at a time or with both legs at the same time.

To perform the leg extension, sit in the machine with shins behind the lower leg pad. Slowly straighten legs as high as possible, and then slowly return to the starting position. Focus on the quadriceps. Do not jerk the weight up or allow it to fall. Control it. Do not snap legs straight at the top of the exercise. If ten reps cannot be performed, lower the weight or patellar tendinitis can result.

E. Leg Curl (Figures 7.5a, 7.5b) – The leg curl isolates the hamstrings and also affects the gluteal muscles and the muscles of the lower back. Some machines allow both legs to be worked at the same time, while others do not. The movement is the same for both. Form over weight is crucial. Attempting to use too much weight or jerking the weight can cause a pulled hamstring. Leg curls are to the hamstrings what leg extensions are to the quads. Because muscular

24 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 98.

25 James Villepigue and Hugo Rivera, 112.

26 Ibid., 114.
balance is so essential, building both quads and hams is important so that one
does not overwhelm the other.\textsuperscript{27}

To perform the leg curl, place the backs of the calves against the lower leg pad. The tops of the kneecaps should be positioned just over the top knee pad and not on the pad itself. Slowly pull the heels up as close to the buttocks as possible, and then slowly return to the starting position. Do not arch the back or lift the pelvis.\textsuperscript{28}

F. Calf Raise (Figures 7.6a, 7.6b) - The calves are hard to develop, so they require low repetitions with high weight. Marathon runners, although they use their calves more than most people, still do not develop big calves. Sprinters do.\textsuperscript{29}

Calves can be worked using the standing calf machine, the seated calf machine, on the leg press machine, or by standing on a block or step while holding dumbbells or using just body weight. Calves may be worked together or separately. Unless seated, stand with the balls of the feet on edge of the machine or step, with the heels hanging off. Position the shoulders under the weight (or hold dumbbells to the side), and keeping the legs straight, rise onto the toes as high as possible. Then, lower the heels below the toes to the point that tension is felt in the calves, but do not perform the exercise too deeply to prevent injury. Pressure felt behind the knees indicates that the bottom level is too deep. Perform the exercise slowly and continue until the calves burn. Use enough weight that high reps are not necessary, or simply do one leg at a time to increase intensity.

\textsuperscript{27} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 102.

\textsuperscript{28} Ibid.

\textsuperscript{29} Steve Leamont, 97.
For seated calf raises, place the knees under the kneepads and perform the exercise the same as with standing calf raises.  

G. Resistance Tube Squat (Figures 7.7a, 7.7b) – Stand on the tube and hold the handles at shoulder level. Keep the back straight and squat at the knees until the thighs are parallel to the floor. The back will arch inward slightly. Return to the starting position. The head should face the sky, abdominals should be tight, and weight should be kept on the heels. Do not lean forward or allow the knees to travel past the toes. Return to the starting position.

H. Runner’s Lunge Stretch (Figures 7.8a, 7.8b) – This stretch targets the hip flexors and also involves the quads and hamstrings. Take the position of the Lunge with one foot stretched out in front and the opposite stretched to the rear. Bend until both hands are on the floor at the forward heel. Hold the stretch for thirty seconds and then repeat with the opposite leg forward.

I. Modified Hurdler Stretch (Figures 7.9a, 7.9b) – This stretch targets the hamstrings, calves, and back. Sit on the floor with the right leg straight in front and the left leg bent inward at a comfortable angle. Lean forward toward the toes as far as possible without bending the knee. Hold the stretch for thirty seconds and then repeat with the left leg.

J. Quadriceps Stretch (Figures 7.10a, 7.10b) – From a standing position, reach backward and hold the left foot with the right hand. Brace against a wall if

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30 Ibid.
32 Ibid., 101.
necessary. Slowly pull the left foot toward the buttocks. Hold the position for fifteen seconds and repeat twice with each leg.  

K. Groin Stretch (Figures 7.11a, 7.11b) – This stretch targets the groin and upper, inner thighs. Sit on the floor with the soles of the feet together. Place the elbows on the inner thighs and pull the feet in as close as possible. Gently press the thighs open and down. Hold the stretch for thirty seconds.

II. Back and Back Exercises

The back consists of several different muscles which comprise the second largest muscle group in the body. Unfortunately, the back is the second most neglected part of the body, even by weight lifters. The apparent reason for the neglect is that what is visible from the front must be most important.

The back is a major key for strength and mobility. Strong legs are useless when topped with a bad back. The back muscles allow stooping, lifting, twisting, turning, and standing tall. Eighty percent of American men suffer from some type of back pain that is mostly muscle related. A back exercise program is the answer for most of these men. A strong back makes all pulling, pushing, and lifting activities easier. Whether rising from bed, pulling or pushing a wheelbarrow, or picking up a box or child, a strong back is required for success and injury prevention. After the legs, the back is the primary group of muscles that make continued mobility into the later years possible.

34 Ibid., 74.
35 James Villepigue and Hugo Rivera, 133.
The major back muscles can be split into two groups: upper back and lower back. The upper back consists of the trapezius (traps), rhomboids, and latissimus dorsi (lats). The traps run from the top of the neck to the edge of the shoulders and also down through the center of the back. Shrugging the shoulders uses the traps. The rhomboids are located between the shoulder blades. Squeezing the shoulder blades together uses the rhomboids. The lats, which make pulling motions possible, run from behind the armpits to the center of the lower back.\textsuperscript{38} The lower back is primarily made up of the erector spinae, which run along each side of the spine just above the hips. These muscles two main jobs are bending the spine backward and bracing the torso when some other part of the body is moved. This stabilization job is performed in tandem with the abdominal muscles, located directly in front of the erector spinae.\textsuperscript{39}

A. Upper Back Exercises - The upper back can be worked with a variety of exercises, but just two with variances for each will be given. Two other exercises, shrugs and upright rows, are technically back exercises, but they are placed under the shoulder routine.

1. Lat Pull-Down (Figures 7.12a, 7.12b) - This exercise primarily works the lats and middle back, but it secondarily works the posterior deltoids, traps, biceps, and brachioradialis (outer forearm). A better exercise is the wide grip pull up (overhand grip, palms facing away), but it is very challenging and few beginners can perform it. The lat pull-down


\textsuperscript{38} Ibid., 90.

\textsuperscript{39} Ibid., 108.
accomplishes the same thing and builds strength to make the wide grip pull up possible later.

Take an overhand grip (palms facing away) on the bar, with hands spread about twice shoulder width. The wide grip minimizes biceps stimulation and keeps the focus on the lats. Place the knees or thighs under the padded support (if there is one), and the feet flat on the floor or platform. Lean back slightly at the hips, stick the chest out, and keep the elbows wide. Maintain this posture throughout the exercise. Slowly and smoothly pull the bar down toward the collar bones, pause at the lowest point, and return to the start position. Do not come off the seat, swing the body in an effort to lift the weight, or slouch as the weight is pulled down.

2. Lat Row (Figures 7.13a, 7.13b) - This exercise works the same muscles as the lat pull-down, but it focuses on the lower lats. Many back exercises basically accomplish the same thing, so there is no need to perform every back exercise. Rows alone can be done with dumbbells, a barbell, or with a cable machine. On a cable machine, different handles allow wide or narrow versions of the exercise. Dumbbell and cable rows will be explained. Since there are so many options, everyone has access to rows regardless of equipment available.

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40 James Villepigue and Hugo Rivera, 140.

41 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 126.
For dumbbell rows, place the left hand and knee on a bench and the right foot on the floor. Pick up and hold a dumbbell in the right arm. This is the starting position. Keep the upper arm close to the body and slowly pull the dumbbell up to the right shoulder, pausing briefly before slowly returning to the starting position. Finish the set with the left arm.42

For cable rows, sit on the bench and place the feet against the foot platform. Hold the bar or handle and lean back slightly. Slowly pull the bar to the midsection, pause briefly, and slowly return to the starting position with the arms fully extended. Do not swing the body in an effort to lift the weight, slam or bounce the weight stack, or arch the back.43

3. Resistance Tube Lat Pull-Down (Figures 7.14a, 7.14b) – With the tube connected to the top of a door, sit far enough from the door so that the arms are extended above the head while holding the handles. Pull the handles down to the chest and then return to the starting position.

4. Resistance Tube Lat Row (Figures 7.15a, 7.15b) – With the tube connected to the door, sit far enough from the door so that the arms are extended to the front while holding the handles. With a straight back, pull the handles back to the chest, and then return to the starting position.

5. Torso Stretch (Figures 7.16a, 7.16b) – This stretch targets the lats. Stand up straight and raise the right arm above the head. Bend the upper body forward and reach with the opposite hand to touch the opposite foot. Do not arch the back.

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42 James Villepigue and Hugo Rivera, 138.

43 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 128.
body to the right until there is a comfortable stretch, and hold the position for thirty seconds. Repeat using the left side.\textsuperscript{44}

6. Lat Stretch On All Fours (Figures 7.17a, 7.17b) – This stretch also targets the lats, but it involves the entire back, as well as the arms and shoulders. Begin with hands and knees on the floor. Reach forward with straight arms and lower the chest to the floor. Move the shoulders to the right as far as comfortably possible and hold the stretch for thirty seconds. Repeat the stretch to the left.\textsuperscript{45}

B. Lower Back Exercises - There are several ways to work the lower back, including multiple styles of deadlifts. A deadlift is simply lifting a barbell off the floor, but it is a power lifting move that involves every muscle group. Rapid increases in weight are possible, and without proper form, injury is certain. Therefore, the conventional deadlift will not be suggested or discussed, but that is not to infer that it is not a good exercise. It is a great exercise, and like the squat, it uses a lot of energy. Beginners should not attempt the deadlift without the instruction of a personal trainer.\textsuperscript{46}

1. Stiff-Legged Deadlift (Figures 7.18a, 7.18b) - This exercise makes lower back work possible with just a set of dumbbells. Since it works the hamstrings about equally as much as the lower back, the hamstrings should not be worked the day before or the day after.

\textsuperscript{44} Kenneth Cooper, 72.

\textsuperscript{45} LaReine Chabut and Madeleine Lewis, 56-57.

\textsuperscript{46} Ibid., 115.
Choose a barbell or dumbbell weight that is light enough to allow perfect form. Position the feet shoulder width apart with toes pointing straight ahead all the way through the movement. Holding the weight in front of the legs, stand up straight. This is the starting position. With locked knees, bend forward at the waist and with a completely straight back, lower the weight to the floor. Return to the starting position and pause for one second before beginning the next rep.  

2. Back Extension (Figures 7.19a, 7.19b) - This exercise isolates the lower back muscles and does not work the hamstrings, but it requires a forty-five degree back extension bench or a machine. A forty-five degree back extension bench allows the exercise to be performed either with body weight or while holding a weight plate at the chest to increase intensity. Place the heels on the foot platform and the thighs against the pad. With a straight back, fold at the waist and drop the head towards the floor. At the bottom, return to the starting position by raising the torso. While performing the exercise, control momentum in both directions and focus on the lower back, and keep the back, head, and neck straight. Do not attempt to help with the legs.

Back extension machines have weight stacks with selector pins. They allow beginners who lack lower back strength to begin with little resistance. Follow the directions on the machine for proper seat height. If there is a foot lever, place the feet on it and push to unlock the weight.

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47 James Villepigue and Hugo Rivera, 120.

48 Richard Laliberte and Stephen C. George, 85.
stack. With a straight back, push the back pad as far back as possible, and slowly return to the starting position. Follow the same procedure as with the forty-five degree back extension bench.

3. Resistance Tube Back Extension (Figures 7.20a, 7.20b) – With the tube connected to a door, sit with legs extended to the front, and far enough from the door so that the arms are extended to the feet while holding the handles. Lean all the way back to the floor with straight arms and then return to the starting position.

4. Lower Back Stretch (Figures 7.21a, 7.21b) – Lie flat on the floor with legs together. Raise the right knee up toward the chest and pull it as close as possible with the hands. Hold the position for thirty seconds and then switch legs. Next, raise both knees up toward the chest and pull them as close as possible with the hands. Hold the position for thirty seconds.49

5. Seated Forward Stretch (Figures 7.22a, 7.22b) – Sit on a chair or bench with feet flat on the floor. Bend forward at the hips as far as comfortably possible and let the arms hang down to the floor. Hold the stretch for thirty seconds.50

III. Chest and Chest Exercises

Chest exercises are by far the most popular weight exercises, to the detriment of all other muscle groups. Unlike the often ignored back muscles, the chest muscles are out front and always in view, and a well developed chest looks good in or out of

49 Kenneth Cooper, 74.

50 LaReine Chabut and Madeleine Lewis, 79.
The most common question asked among weight lifters is, “How much do you bench?” The bench press is the signature lift men use to demonstrate or quantify strength, but overworking the chest while ignoring the other muscle groups will lead to injured shoulders and an inability to lift weights at all. Regardless of the enjoyment involved, no muscle group should be worked more often or more intensely than any other muscle group. A strong chest not only looks good and gives a picture of strength, but it allows greater strength for any sport or daily activity that involves pushing or punching. Strong chest muscles reduce the risk of injury to the more susceptible shoulders.

The primary chest muscles are the pectoralis major, while the secondary chest muscles are the pectoralis minor and the serratus anterior. The pectoralis minor lie underneath the pectoralis major, and the serratus anterior are the fingerlike muscles on the sides of the ribcage below the pectoralis major. The chest muscles are known as pecs.

The primary chest exercise is the bench press, also known as the chest press, the flat bench, or simply, the bench. The bench focuses on the pecs but also works the front of the deltoids and the triceps. The bench can be done with a barbell, dumbbells, or various machines. There are also incline and decline versions of the bench. The incline version targets the upper chest and the decline version targets the lower chest.

In the author’s opinion, dumbbells or home gyms that use nylon resistance rods are far superior to a barbell for several reasons, and these exercises are recommended for

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51 Ibid., 68.
52 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 133.
53 Liz Neporent and Suzanne Schlosberg, 118.
beginners as well as veterans. They allow a greater range of motion and a deeper stretch at the bottom of the movement. They better isolate the pecs and allow more muscle contraction at the top of the movement. They are harder to control than a barbell, therefore strengthening and developing the chest in ways a barbell cannot. Even veteran barbell bench pressers will experience significant soreness after the first few dumbbell bench sessions if they do not ease into the exercise slowly over a few workouts. Last but definitely not least, they allow the bench to be performed with no spotter, which makes working out alone much safer.

The barbell bench press is notorious for injuring shoulders, and fortunately, it is not paramount to developing chest size and strength. The only benefit a barbell bench press offers that the other exercises cannot is a barbell bench maximum lift. But, if those who avoid the exercise desire to know their maximum lift, they can simply get a spotter to assist them on the barbell bench and find it out. Ego can never become motivation for working out. There will always be bigger and stronger people, and there will always be smaller and stronger people. As stated in Chapter Five: How to Begin A Lifestyle of Fitness, love for God should be the motivation for fitness. Machismo reveals a love for self. The goal must always to be to honor God with both body and mind while strength training. Proverbs 16:18 says that pride goes before destruction. With the understanding that the barbell bench press is not recommended, it will still be explained for those who have no other way to perform the bench.

A. Barbell Bench Press (Figures 7.23a, 7.23b) - Always use a spotter. Even when using light weight, injuries that can restrict the completion of a rep are always possible and can lead to additional injuries. Lie face up on the bench with feet on

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55 James Villepigue and Hugo Rivera, 156.
the floor and space the hands evenly on the bar with a grip slightly wider than the shoulders. Barbells have marks to ensure equal spacing of the hands. Lift the bar from the uprights or use a spotter’s assistance. Slowly lower the bar to the chest again immediately. Do not lift the back or buttocks off the bench or the feet off the floor, snap or lock out the elbows at the top, or bounce the barbell off the chest, and remember to breathe.\(^{56}\)

B. Dumbbell Bench Press (Figures 7.24a, 7.24b) – To get heavier dumbbells into position, use a spotter or sit with them resting on the knees and put them into place while lying back. The proper starting point for the dumbbells is to the sides and even with the chest, and with the triceps about parallel to the floor. Before the start of the upward press, expand the chest, which will also pull the shoulder blades together. This takes the shoulders out of the exercise and puts the primary emphasis on the chest. During the upward press, the elbows can be kept close to the body at about forty-five degrees, or away from the body at about ninety degrees. Use the position that is most comfortable and that puts the least strain on the shoulders. Generally, wider elbows result in more shoulder strain. At the top, the dumbbells may be touched together or kept apart. Start down immediately and slowly, returning along the same path to the starting position.\(^{57}\) Do not lift the head off the bench, turn the hands inward facing each other at the top, or go too deep at the bottom.\(^{58}\)

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\(^{56}\) Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 134.

\(^{57}\) James Villepigue and Hugo Rivera, 164.

\(^{58}\) Steve Leamont, 197-198.
When finished with a light dumbbell set, sit back up and place the dumbbells on the floor. Sitting back up with heavy dumbbells is impossible. The safest way to get the dumbbells to the floor is to lower them simultaneously while lying on the bench. There is no harm in allowing dumbbells to drop an inch or two to the floor. If unable to perform this final phase of the exercise, use a spotter to return the dumbbells to the floor.

C. Incline Bench (Figures 7.25a, 7.25b) – This exercise is performed on an incline bench with a barbell, dumbbells, or machines. It is virtually identical to the bench, but focuses on the upper pecs. Follow the same movements as the bench press, but lower the weight to the upper part of the chest, just below the collar bones instead of to the nipple line.\(^{59}\)

D. Decline Bench (Figures 7.26a, 7.26b) - This exercise is performed on a decline bench with a barbell, dumbbells, or machines. It is virtually identical to the bench, but focuses on the lower pecs. Follow the same movements as the bench press, but lower the weight to the lower part of the chest, just below the nipple line.\(^{60}\) A home gym will be used for the pictures of this exercise.

E. Dumbbell Fly (Figures 7.27a, 7.27b) - This exercise can be performed to target the middle, upper, or lower chest muscles, but any of the three will involve the complete chest to some degree. The fly isolates the chest muscles and minimizes any focus on the shoulders and triceps.\(^{61}\)

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\(^{59}\) Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 138.

\(^{60}\) Ibid.

\(^{61}\) James Villepigue and Hugo Rivera, 53.
Lie on a flat, incline, or decline bench with feet flat on the floor. Press the weight to the top and turn the palms inward facing each other. Do not lock the elbows, but keep them stiff in a slightly bent position for the entire movement. Lower the dumbbells until there is a good stretch in the chest, with the triceps near or just below parallel to the floor, then immediately and slowly return to the starting position. Focus on proper form and do not use too much weight, straighten the elbows, or arch the back. For an incline fly, follow this same movement on an incline bench. For a decline dumbbell fly, follow this same movement on a decline bench.

F. Pushup (Figure 7.28a, 7.28b) – Pushups work the chest, shoulders and triceps and can be performed anywhere. The wider the hands, the more the outer chest muscles are targeted. The closer the hands, the more the inner chest muscles and triceps are targeted.

Lie on the floor with legs together, weight on the toes and hands, and hands on the floor pointing forward. Keep the back and legs straight and slowly push away from the floor until the elbows are straight. At the top, slowly and immediately return to the starting position. Face the floor throughout the movement and keep the abs tight. Do not snap or lock the elbows at the top, rest at the top or bottom, or allow the back to sag. Beginners who are too weak to perform any or many pushups may do a modified version with the knees touching the floor instead of the toes.

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62 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 144.

63 Ibid., 142.
G. Resistance Tube Chest Press (Figures 7.29a, 7.29b) – With the resistance tube connected to a door, stand facing away from the door while holding the handles to the side at chest level. Press forward until the arms are extended and then return to the starting position. An incline version can be performed by pressing at an upward angle, and a decline version can be performed by pressing at a downward angle.

H. Resistance Tube Chest Fly (Figures 7.30a, 7.30b) - With the resistance tube connected to a door, stand facing away from the door while holding the handles extended to the side at chest level. Keeping the arms straight, bring the handles together in front of the chest and then return to the starting position.

I. Chest Stretch (Figures 7.31a, 7.31b) – This stretch targets the chest, anterior deltoids, and biceps. Standing, extend the right arm straight out to the side and hold onto a doorframe with the right hand. Move forward slightly until a good stretch is felt and hold for thirty seconds. Repeat with the left side.

IV. Shoulders and Shoulder Exercises

The shoulders are one of the least trained body parts, and are often completely neglected. The shoulder muscles, known as the deltoids or delts, are relatively small and tire easily, but they respond quickly when trained. The deltoids are three muscles that run from the top of the arms down to the center of the upper arms.\(^64\) The anterior deltoids are in the front and raise the arms upward from the front. The medial deltoids are in the middle and raise the arms upward from the side. The posterior deltoids are in the back.

\(^{64}\) Liz Neporent and Suzanne Schlosberg, 137.
and draw the arms backwards. Together, these muscles form a triangle on the shoulders. The name deltoid comes from the Greek letter delta, which is a triangle.\textsuperscript{65}

There is no exercise that completely isolates any of the three shoulder muscles, but each muscle can and should be targeted with a specific exercise. Strong shoulders make most arm movements easier and prevent injuries that happen in daily activities and physical hobbies. Since most upper body exercises involve the shoulders, strengthening them will make working other muscle groups easier.\textsuperscript{66}

A. Dumbbell Shoulder Press (Figures 7.32a, 7.32b) – Also known as the military press, the shoulder press can be performed either standing or sitting with a barbell, dumbbells, or with machines. The dumbbell shoulder press is preferred over the barbell press, and it will be described. This exercise works all three deltoid muscles, but primarily the front and middle deltoids. A narrower grip focuses more on the middle and rear deltoids, and a wider grip focuses more on the front and middle deltoids. The triceps are secondarily involved.

Set an incline bench to the second notch from the top, about an 80-degree angle. Hold the dumbbells even with the shoulders with the palms facing forward, not toward each other. Lift the weight overhead in front of the head without locking out the elbows at the top, then slowly and immediately return to the starting position. Keep the head and neck straight and avoid any extra movement in an attempt to help lift the weight or the chest muscles will be brought into play and minimize the shoulder benefit. Do not allow the elbows to

\begin{flushright}
\textsuperscript{65} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 151.
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\textsuperscript{66} Steve Leamont, 137.
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dip below the starting position.\textsuperscript{67} Performing this exercise behind the neck is not recommended because it is notorious for damaging the rotator cuffs.\textsuperscript{68}

B. Dumbbell Lateral Raise (Figures 7.33a, 7.33b) – This exercise primarily targets the middle deltoids without using the triceps. It is not a strength exercise, so use a low amount of weight to and concentrate on good form. Standing or sitting, hold the dumbbells to the sides with palms facing the legs. With a slight bend in the elbows, simultaneously raise the dumbbells away from the sides of the body until the arms are parallel to the floor, and then slowly return to the starting position. Keep the body straight and do not lean for momentum.\textsuperscript{69} The exercise can also be performed one arm at a time.

C. Dumbbell Front Raise (Figures 7.34a, 7.34b) - This exercise primarily targets the front deltoids without using the triceps. It is not a strength exercise, so use a lower amount of weight and concentrate on good form. Stand with the knees slightly bent and the feet shoulder-width apart. Hold a dumbbell in each hand in front of the body with the palms facing the thighs. Slowly raise one dumbbell to the front until the arm is parallel to the floor, then slowly and return to the starting position. Do a complete set with one arm and then switch to the other arm. Maintain the starting posture and do not rock back and forth in an effort to use momentum.\textsuperscript{70}

\textsuperscript{67} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 151.

\textsuperscript{68} James Villepigue and Hugo Rivera, 182.

\textsuperscript{69} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 156.

\textsuperscript{70} Ibid., 158.
D. Dumbbell Reverse Fly (Figures 7.35a, 7.35b) – Also known as a bent-over lateral raise, this exercise primarily targets the rear deltoids, one of the most neglected muscles in the body.\(^71\) It can be performed while sitting or standing, or while sitting backwards on an incline bench or chest fly machine. It is not a strength exercise, so use a lower amount of weight and concentrate on good form.

For the sitting version, sit flat on a bench and bend forward at the waist. Hold a dumbbell in each hand with the palms facing each other. Bend the elbows slightly as the dumbbells are raised away from body. Focus on squeezing the shoulder blades together at the top of the movement, and then slowly return to the starting position. Keep the head still throughout the movement.

E. Shrug (Figures 7.36a, 7.37b) - This exercise isolates the trapezius muscles, which run down the neck into the upper back and along the upper shoulders. Stronger traps give stability to the neck.\(^72\) Using a barbell or dumbbells, stand holding the weight to the front with palms facing the thighs. Hold the shoulders back but drooped down as far as they naturally go, and hold the chest out. With a straight body and straight arms, lift the weight by raising the shoulders up toward the ears. Pause briefly at the top before returning to the starting position. Do not rock back and forth trying to lift the weight with momentum.\(^73\)

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\(^{71}\) James Villepigue and Hugo Rivera, 186.

\(^{72}\) Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 158.

\(^{73}\) Richard Laliberte and Stephen C. George, 64.
F. Resistance Tube Shoulder Press (Figures 7.37a, 7.37b) – Rest on the knees with the tube under the knees. Hold the handles at shoulder level. Press the handles straight overhead and then return to the starting position.

G. Resistance Tube Lateral Raise (Figures 7.38a, 7.38b) – Stand on the tube while holding the handles to the sides with palms facing the legs. Raise the right arm to the side until it is parallel to the floor and then return to the starting position. After completing the full set, repeat with the left arm.

H. Resistance Tube Front Raise (Figures 7.39a, 7.39b) – Stand on the tube while holding the handles to the front with palms facing the thighs. Raise the right arm to the front until it is parallel to the floor and then return to the starting position. After completing the full set, repeat with the left arm.

I. Resistance Tube Reverse Fly (Figures 7.40a, 7.40b) – With the tube connected to the door, stand far enough from the door so that the arms are extended to the front while holding the handles at chest level with palms facing the door. Pull the handles back as far as possible and then return to the starting position.

J. Resistance Tube Shrug (Figures 7.41a, 7.41b) – Stand on the tube with most of the tube between the feet to provide instant resistance, and hold the handles to the side. With straight arms, raise the shoulders up toward the ears. Pause briefly at the top before returning to the starting position.

K. Front Shoulder Stretch (Figures 7.42a, 7.42b) – Hold the right arm across the chest. Hook the right elbow with the left hand and lightly pull the right arm
closer to the body. Hold the stretch for thirty seconds and then repeat with the left arm.74

L. Triceps/Shoulder Stretch (Figures 7.43a, 7.43b) – This stretch is used for shoulders and triceps. Raise the right arm overhead and bend it at the elbow so that the fingers reach down the spine. Place the left hand on the right elbow and gently pull down so that the right fingers reach farther down the spine. Hold the stretch for thirty seconds and then repeat with the left arm.75

V. Arms and Arm Exercises

The arms link the upper body to the rest of the world. Without strong arms, carrying anything from a bag of groceries to a briefcase is difficult. Strong arms take advantage of the strength of the upper body and provide protection for the elbows. They minimize back pain because the more lifting the arms do, the less the back has to deal with.76 They also minimize injuries from sports and daily activities. Strong forearms wards off carpal tunnel syndrome, which is an inflammation of the wrist nerves caused by repetitive movements.77

Since the arm muscles are small, less time is necessary to produce great results. The arms are made up of the biceps, triceps, and forearm (wrist) muscles. Because the arms are involved in all upper body exercises, they should always be worked after the big

74 LaReine Chabut and Madeleine Lewis, 53.
75 Ibid., 61.
76 Richard Laliberte and Stephen C. George, 146.
muscle groups. Otherwise, the arms will be too tired to produce any real benefit when the big muscle groups are worked.78

The forearms are targeted with virtually every exercise involving the arms. Furthermore, anytime the hands are gripping, the forearms are working whether the arms are involved in the movement or not. Therefore, specific forearm exercises are unnecessary. They get stronger with the upper arms because the more the upper arms are strengthened, the more load the forearms are required to hold.79

A. Biceps – The biceps muscles, also called bi’s, are located on the front of the upper arm. They are a two-headed muscle that serves to lift the forearms upward. There are many ways to do curls. Experiment, change often, and always perform any new curl as strictly as possible.80 Since biceps are involved in most back exercises, they should be worked the same day as the back with a complimentary workout.

1. Standing Curl (Figures 7.44a, 7.44b) – The classic biceps exercise can be performed with a barbell or dumbbells. Start by holding the weight at the thighs with the palms facing outward, shoulder-width apart. Slowly raise the weight by bending the elbows toward the shoulders, and then slowly lower the bar back to the starting position in a controlled manner. Keep the knees slightly bent and the elbows tucked in close to the body. Do not rock back and forth or bend backward in an effort to lift the

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78 Ibid. 157-158.

79 Richard Laliberte and Stephen C. George, 47.

80 James Villepigue and Hugo Rivera, 211.
weight. For the biceps to be isolated and the shoulders kept out of the exercise, the movement must be strict.\textsuperscript{81}

2. Concentration Curl (Figures 7.45a, 7.45b) – Since this exercise ensures strict movement and isolation of the biceps, it is harder than standing curls and requires less weight. With a dumbbell in one hand, sit on a bench, lean forward, and rest the back of the upper arm on the inner part of the thigh (right arm to right thigh, left arm to left thigh). The palm should be facing the opposite knee. Raise the dumbbell slowly just short of the shoulder, then slowly return to the starting position. Keep the back straight and do not lean, rock or move the braced leg side to side in an effort to lift the weight. When finished with one arm, repeat with the other arm.\textsuperscript{82}

3. Preacher Curl or Machine Curl (Figures 7.46a, 7.46b) - Preacher curl benches and machine curl benches place the arms on an incline with the elbows out away from the body. The biceps are isolated and cheating is difficult. These exercises develop the lower portion of the biceps and also cause a greater contraction at the top of the movement. They also work the forearms very hard. Even for those who work their biceps regularly, preacher curls or machine curls can produce severe soreness, so ease into them the first few times.

For a machine curl, follow the seating instructions for proper height adjustment. All machines are different. Failure to use the proper

\textsuperscript{81} Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 169.

\textsuperscript{82} Ibid., 172.
height will make the exercise less effective and place undue stress on the elbows and shoulders. Complete the movement slowly and in control.

For preacher curls, a barbell or dumbbells may be used. While holding the weight up in the curled position at the top, place the elbows on the bench and lean the chest against the front pad. Make sure the backs of the arms are flat against the bench. Focus on the biceps and lean forward, not backward. Hold for two seconds at the top before starting downward, but at the bottom, return immediately to the top. Do not lock out at the bottom.83

4. Resistance Tube Biceps Curl (Figures 7.47a, 7.47b) - Stand on the tube and hold the handles to the side. Raise the handles to the shoulders, pause, and then return to the starting position.

5. Biceps Stretch (Figures 7.48a, 7.48b) – Extend both arms to the side with palms facing forward. Rotate the thumbs downward and back. Hold for thirty seconds.84

B. Triceps – The triceps muscles, also called tri’s, are located on the back of the upper arms. They are a three-headed muscle with a horseshoe appearance, and are involved any time the shoulders or chest do pressing or pushing movements.85 The long head (inner) is on the inside of the arm, the medial head (middle) is on the lower part of the arm above the elbow and the lateral head (outer) is on the

83 James Villepigue and Hugo Rivera, 216.

84 LaReine Chabut and Madeleine Lewis, 63.

85 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 178.
outside of the arm. The long and medial head are usually worked together, and the lateral head is worked during exercises with the palms up.

Many people make the mistake of focusing on their biceps to achieve big arms, failing to realize that two-thirds of the upper arm is triceps. Building stronger, bigger triceps involves several different exercises that use different angles. Since triceps are involved on most chest exercises, they should be worked the same day as the chest with a complimentary workout.

1. Dumbbell Triceps Extension (Figures 7.49a, 7.49b) - This exercise focuses on the middle and inner heads of the triceps and can be performed seated or standing. Grip the inside end of a dumbbell evenly with both hands and raise it over the head. To keep the triceps isolated, keep the elbows pointed to the sky at all times and the arms close to the head. As the dumbbell is slowly lowered, focus on the triceps muscles and stop when the forearms are slightly below parallel. Without resting or using momentum, press the weight back to the top without locking out the elbows.

2. Bench Dip (Figures 7.50a, 7.50b) - This exercise focuses on all three heads of the triceps. Use two chairs or benches of the same height for this exercise. Spread the chairs far apart enough to place the hands on one

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87 Steve Leamont, 124.

88 James Villepigue and Hugo Rivera, 191.

89 Ibid., 192.
chair and the feet on the other, with the back an inch or two away from the rear chair. Place the hands palms down and shoulder-width apart on the rear bench and the heels on the front chair. Keeping the legs straight, the head up, and the elbows in, slowly dip until the upper arms and forearms are at about ninety degrees, and then slowly return to the starting position. As strength is built, intensity can be increased by holding a dumbbell or weight plate on the quadriceps.\textsuperscript{90}

3. Dumbbell Triceps Kickback (Figures 7.51a, 7.51b) - This exercise focuses on the outer head of the triceps, as does any triceps exercise performed with the palms facing up. Lean over with one foot in front of the other and the chest parallel to the floor. Work each arm separately. Hold a dumbbell in the right arm with the palm facing forward, the right biceps in line with the chest, and the right forearm hanging at a ninety-degree angle to the floor. Extend the forearm until the arm is straight and then slowly return to the bottom. Repeat the exercise with the other arm.\textsuperscript{91}

4. Resistance Tube Triceps Extension (Figures 7.52a, 7.52b) – With the tube attached to the top of a door, face away from the door. Handles should be held behind the head with the upper arms pointed skyward and the forearms about parallel to the floor. Place one foot in front of the other and lean forward. Fully extend the arms while keeping the hands close together and then return to the starting position.

\textsuperscript{90} Steve Leamont, 127.

\textsuperscript{91} James Villepigue and Hugo Rivera, 208.
5. Resistance Tube Triceps Kickback (Figures 7.53a, 7.53b) – With the tube attached to the top of a door, face the door. Hold the left handle close to the chest and the right handle at chest level with the palm facing up. Stand far enough from the door to provide ample resistance. Keeping the upper right arm close to the side, pull the right handle downward until the right arm is fully extended. Complete a full set and then repeat with the left arm.

6. Triceps Towel Stretch (Figures 7.54a, 7.54b) – Hold a towel in the right hand. Extend the right arm over the head and then bend it at the elbow so that the towel hangs down the back. With the right hand, reach behind the back and hold the towel. Gently pull down on the towel with the left hand and hold for thirty seconds. Repeat with the left arm.\(^92\)

VI. Abdominals and Abdominal Exercises

The abdominals, or abs, are generally considered the most visually stunning and desired muscles. Hours of daily ab work will give the benefit of strong abs, but unless adequate body fat is lost, even the biggest abs will never be seen. Body fat percentage has to be lowered to the point that the abs are not filled in and covered over with fat. Abdominal exercise contraption manufacturers do not disclose this fact in their marketing.\(^93\)

There is a common misunderstanding that belly fat can be lost by doing ab work. This is the spot reduction myth. Any exercise burns calories evenly throughout the body,

\(^92\) LaReine Chabut and Madeleine Lewis, 62.

\(^93\) Ibid., 227.
not just the area being worked. Men store more fat in the abdominal section than anywhere else, making it the last area to get toned, and therefore, the hardest area to tone.94

Ab exercises will not reduce fat around the midsection, but they do serve many other important purposes. The abs are constantly at work during sitting, standing, and moving. They work together with the spine and back muscles to support the rest of the body with all movements, so they are involved in every exercise to some degree. Weak abs do not give the spine and back muscles the required support, so strengthening the abs can reduce or eliminate back pain.95

The rectus abdominis is the first and largest of four abdominal muscles. A wide, flat sheet of muscle, it runs from just under the chest to just below the naval. The internal and external obliques run diagonally along the sides and wrap around the waist. They are involved in any twisting or rotating movement. The transverse abdominis, the deepest of the abdominal muscles, lies beneath the rectus abdominis. It is involved in sneezing, coughing, and exhaling forcefully. No specific exercises target this muscle, but it can be strengthened by exhaling forcefully during the positive phase of ab exercises.96

A. Crunch (Figures 7.55a, 7.55b) - This is the basic ab exercise. Lie on the floor with the knees bent and the feet flat on the floor. The position of the arms determines the intensity of the crunch: arms to the side gives low intensity; arms crossed over the chest gives medium intensity; elbows bent behind the head with

94 Richard Laliberte and Stephen C. George, 76-77.
95 Liz Neporent and Suzanne Schlosberg, 181.
96 Deidre Johnson-Cane, Jonathan Cane, and Joe Glickman, 188.
fingers interlocked gives high intensity. Tighten the abs and slowly curl the torso up until the shoulder blades are off the floor, then slowly return to the starting position without completely relaxing on the floor. Imagine holding a softball between the chin and chest to help keep the head and neck in a neutral position. Keep the elbows as they are in the starting position and do not use them to try to pull or lift. Keep the lower back pressed against the floor at all times.\textsuperscript{97}

B. Ball Crunch (Figures 7.56a, 7.56b) - This exercise is performed on a stability ball, an inexpensive but valuable piece of equipment that can be purchased at Wal Mart or any sports store. Since the ball is less stable than the floor, it forces the use of small stabilizing muscles in the midsection to maintain balance.

Begin by sitting forward of center on the ball with the feet flat on the floor about shoulder width apart. Lie back with the middle back on top of the ball. Arm position rules are the same as for the crunch. Contract the abs and raise the torso off the ball until the shoulder blades and middle back are off the ball, then slowly return to the starting position. Imagine holding a softball between the chin and chest to help keep the head and neck in a neutral position. Keep the elbows as they are in the starting position and do not use them to try to pull or lift.

C. Oblique Crunch (Figures 7.57a, 7.57b) - This exercise targets the obliques, one side at a time. Lie on the floor with the left leg bent and the left foot flat on the floor. Place the right ankle on the left knee, the left hand behind the neck, and the right arm stretched out on the floor. Slowly curl up and twist the left shoulder toward the right knee. Hold that position for a second and then return to the starting position. Imagine holding a softball between the chin and chest to help

\textsuperscript{97} Ibid., 190.
keep the head and neck in a neutral position, and do not pull with the elbow.

When finished with the left side, repeat with the right side.

The Fitness Program

The program endorsed by the author is a three-day, split routine that combines strength training, cardio training, and flexibility training. It requires a form of resistance and a form of cardio. Each of the three routines target a specific group of muscles and takes around fifty minutes to complete. The three routines may be completed on consecutive days, but there must be a day off between Day Three and Day One because both days involve leg exercises.

By leaving out the cardio, the three routines of this program can be performed in about twenty minutes each for a total of one hour per week. The benefits of cardio training are not lost because each routine is performed with no rest between sets. It must be stressed that the exercises are not performed any faster. All the rules for proper form and procedure still apply. This type of workout is called circuit training, where an anaerobic workout is done so rapidly that it provides aerobic benefit.98

There are several alternative programs to suit different preferences. Any of the workouts will produce results, and the best one for each person is the one they are most likely to do. The first alternative is a two-day, split routine workout for people who only have time to work out two days per week. In order to target every muscle group in just two days, the routines are longer. The second alternative is a full-body routine, where every muscle group is worked in a single workout, two or three days per week. Since

every muscle group is worked during each workout, there must be a day off between workouts. The full-body routine is less intense, with just a warm up set and a work set for every exercise, and it can be performed in an hour or less. It is a good choice for beginners. The third alternative is a resistance tube workout, which can also be used for travel. The entire routine is performed two or three days per week. Resistance tube intensity is chosen by using different diameters of tubes or by using multiple tubes. Since tubes provide considerably less resistance than other forms of strength training, perform three sets for every exercise, and no warm up set is necessary.

I. Three-Day Split Routine – Do four five-minute cardio intervals between muscle groups, or do one twenty to thirty-minute cardio session.

**Day One**

**Lower Back**
- Stiff-Legged Deadlift or Back Extension (3 x 10)
- Lower Back Stretch
- Seated Forward Stretch

**Upper Back**
- Lat Pull-Down (3 x 10)
- Lat Row (3 x 10)
- Lat Stretch On All Fours
- Torso Stretch

**Heavy Legs**
- Squat, Leg Press, or Lunge (3 x 10)
- Modified Hurdler Stretch
- Groin Stretch

**Biceps (Select two of the following)**
- Standing Curl (3 x 10)
- Concentration Curl (3 x 10)
- Preacher Curl (3 x 10)
- Biceps Stretch

**Abs**
- Crunch or Ball Crunch (3 x 15-30)
- Oblique Crunch (3 x 10-15)
Day Two
Chest (Select one or two forms of Bench Press)
Barbell or Dumbbell Bench Press (3 x 10)
   Incline Bench Press (3 x 10)
   Decline Bench Press (3 x 10)
   Dumbbell Fly (3 x 10)
   Chest Stretch

Triceps
Overhead Dumbbell Extension (3 x 10)
   Bench Dip (3 x 10)
   Triceps Kickback (3 x 10)
   Triceps Towel Stretch

Abs
Crunch or Ball Crunch (3 x 15-30)
   Oblique Crunch (3 x 10-15)

Day Three
Shoulders
Dumbbell Shoulder Press (3 x 10)
Dumbbell Lateral Raise (3 x 10)
Dumbbell Front Raise (3 x 10)
Dumbbell Reverse Fly (3 x 10)
   Shrug (3 x 15)
   Front Shoulder Stretch
   Triceps/Shoulder Stretch

Light Legs
Leg Extension (3 x 10)
   Leg Curl (3 x 10)
   Calf Raise (3 x 10)
   Quadriceps Stretch

Abs
Crunch or Ball Crunch (3 x 15-30)
   Oblique Crunch (3 x 10-15)
II. Two-Day Split Routine - Do four five-minute cardio intervals between muscle groups, or do one twenty to thirty-minute cardio session.

**Day One**

**Legs**
- Squat, Leg Press, or Lunge (3 x 10)
- Leg Extension (3 x 10)
- Leg Curl (3 x 10)
- Calf Raise (3 x 10)
- Modified Hurdler Stretch
  - Groin Stretch
  - Quadriceps Stretch

**Lower Back**
- Stiff-Legged Deadlift or Back Extension (3 x 10)
  - Lower Back Stretch
  - Seated Forward Stretch

**Upper Back**
- Lat Pull-Down (3 x 10)
- Lat Row (3 x 10)
- Lat Stretch On All Fours
  - Torso Stretch

**Biceps (Select two of the following)**
- Standing Curl (3 x 10)
- Concentration Curl (3 x 10)
- Preacher Curl (3 x 10)
- Biceps Stretch

**Abs**
- Crunch or Ball Crunch (3 x 15-30)
- Oblique Crunch (3 x 10-15)

**Day Two**

**Chest (Select one or two forms of Bench Press)**
- Barbell or Dumbbell Bench Press (3 x 10)
- Incline Bench Press (3 x 10)
- Decline Bench Press (3 x 10)
- Dumbbell Fly (3 x 10)
- Chest Stretch
**Shoulders**
- Dumbbell Shoulder Press (3 x 10)
- Dumbbell Lateral Raise (3 x 10)
- Dumbbell Front Raise (3 x 10)
- Dumbbell Reverse Fly (3 x 10)
- Shrug (3 x 15)
- Front Shoulder Stretch
- Triceps/Shoulder Stretch

**Triceps**
- Overhead Dumbbell Extension (3 x 10)
- Bench Dip (3 x 10)
- Triceps Kickback (3 x 10)
- Triceps Towel Stretch

**Abs**
- Crunch or Ball Crunch (3 x 15-30)
- Oblique Crunch (3 x 10-15)

III. Full-Body Routine - Do four five-minute cardio intervals between muscle groups, or do one twenty to thirty-minute cardio session.

**Legs**
- Squat, Leg Press, or Lunge (1 x 10)
- Leg Extension (1 x 10)
- Leg Curl (1 x 10)
- Calf Raise (1 x 10)
- Modified Hurdler Stretch
  - Groin Stretch
  - Quadriceps Stretch

**Lower Back**
- Stiff-Legged Deadlift or Back Extension (1 x 10)
- Lower Back Stretch
- Seated Forward Stretch

**Upper Back**
- Lat Pull-Down (1 x 10)
- Lat Row (1 x 10)
- Lat Stretch On All Fours
- Torso Stretch
Chest (Select one or two forms of Bench Press)
  Barbell or Dumbbell Bench Press (1 x 10)
  Incline Bench Press (1 x 10)
  Decline Bench Press (1 x 10)
  Dumbbell Fly (1 x 10)
  Chest Stretch

Shoulders
  Dumbbell Shoulder Press (1 x 10)
  Dumbbell Lateral Raise (1 x 10)
  Dumbbell Front Raise (1 x 10)
  Dumbbell Reverse Fly (1 x 10)
  Shrug (1 x 15)
  Front Shoulder Stretch
  Triceps/Shoulder Stretch

Biceps (Select two of the following)
  Standing Curl (1 x 10)
  Concentration Curl (1 x 10)
  Preacher Curl (1 x 10)
  Biceps Stretch

Triceps
  Overhead Dumbbell Extension (1 x 10)
  Bench Dip (1 x 10)
  Triceps Kickback (1 x 10)
  Triceps Towel Stretch

Abs
  Crunch or Ball Crunch (3 x 15-30)
  Oblique Crunch (3 x 10-15)

IV. Resistance Tube Workout/Travel Workout – Perform the entire workout two or three days per week. Do four five-minute cardio intervals between muscle groups, or do one twenty to thirty-minute cardio session.

Legs
  Lunge (1 x 10)
  Squat (3 x 10)
  Modified Hurdler Stretch
  Groin Stretch
  Quadriceps Stretch
Lower Back
Back Extension (3 x 10)
Lower Back Stretch
Seated Forward Stretch

Upper Back
Lat Pull-Down (3x 10)
Lat Row (3x 10)
Lat Stretch On All Fours
Torso Stretch

Chest (Select one or two forms of Chest Press)
Chest Press (3 x 10)
Incline Chest Press (3x 10)
Decline Chest Press (3 x 10)
Chest Fly (3 x 10)
Chest Stretch

Shoulders
Shoulder Press (3 x 10)
Lateral Raise (3 x 10)
Front Raise (3 x 10)
Reverse Fly (3 x 10)
Shrug (3 x 15)
Front Shoulder Stretch
Triceps/Shoulder Stretch

Biceps
Biceps Curl (3 x 10)

Triceps
Triceps Extension (3 x 10)
Triceps Kickback (3 x 10)
Triceps Towel Stretch

Abs
Crunch or Ball Crunch (3 x 15-30)
Oblique Crunch (3 x 10-15)
APPENDIX ONE

Research Instrument

A Fitness Model For Pastors – Survey

The author prepared the following survey at www.freeonlinesurveys.com. The survey was distributed by posting a link on Facebook, and by emailing the link to friends in ministry who shared it with other pastors. The author randomly searched for church websites across the United States and emailed the survey link to every pastor found with an email address. Three hundred ninety-two responses were received from pastors in all fifty states.

A Fitness Model for Pastors - Survey

My name is Kevin Elders from Living Way Community Church in Greer, SC. I am working on a Doctor of Ministry dissertation at Liberty Theological Seminary. My subject is "A Fitness Model for Pastors."

As part of my research, I need answers from as many pastors as possible, regardless of title, for the following questions on matters of fitness. Your answers will help me to compile an overall picture of the fitness level among pastors, which I suspect will mirror the fitness level among all Americans:
- 127 million Americans are overweight with nine million morbidly obese.
- For those over twenty-five years of age, 80 percent are overweight.
- Almost 80 percent of Americans fail to meet the recommended activity level requirements of 30 minutes of physical activity 4-5 times per week
- 1/4 of Americans are completely sedentary

- Since 1990, there has been a 76 percent increase in type 2 diabetes (the sedentary disease) in adults aged 30-40

Thank you for helping me, and it will be an additional help if you forward the link to this survey to anybody you know in ministry, post it on your Facebook/Twitter accounts, etc.

Blessings,
Kevin Elders
Associate Pastor and Youth
Living Way Community Church, Greer, SC

1) What is your ministry position?

(The last five responses are given)

- Missison Deployment Director.
- Senior pastor/ church planter
- Associate Pastor/Youth Ministries
- pastor to married adults
- Pastor of Student Ministries

2) Where is your church/ministry position located? (City, State)

(The last five responses are given)

- Jackson, Mississippi
- Manchester, NH
- Derry, NH
- Orlando, FL
- Bozeman, MT
3) Sex

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<tr>
<td>Female</td>
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Total responses: 392

4) Age

Average: 44.32
Range: 20<=78
Median: 44
Total Responses: 392

5) Height

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<td>6'7&quot;</td>
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6)  Weight

Average: 198.50
Range: 107<=>323
Median: 195
Total Responses: 392

7)  How would you describe your present body composition?

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Total responses: 392

8)  Do you think God cares about our physical fitness?

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Total responses: 392
9) Do you smoke?

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Total responses: 392

10) Are you being treated for high blood pressure?

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Total responses: 392

11) Do you get a yearly physical?

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Total responses: 392

12) On average, how many days per week do you engage in at least 30 minutes of cardiovascular exercise?

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</tr>
<tr>
<td>2</td>
<td>15.1</td>
<td>59</td>
</tr>
<tr>
<td>3</td>
<td>20.9</td>
<td>82</td>
</tr>
<tr>
<td>4</td>
<td>13.3</td>
<td>52</td>
</tr>
</tbody>
</table>
13) On average, how many days per week do you engage in at least 30 minutes of strength training exercise?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>48.5</td>
</tr>
<tr>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>3</td>
<td>16.6</td>
</tr>
<tr>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td>7</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Total responses: 392

14) On average, other than cardiovascular or strength training exercises, how many days per week do you engage in some form of physical exertion (basketball, soccer, tennis, etc., playing outside with your children, walking the dog) that lasts at least 30 minutes?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>24.7</td>
</tr>
<tr>
<td>1</td>
<td>23.2</td>
</tr>
<tr>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>3</td>
<td>15.6</td>
</tr>
<tr>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td>6</td>
<td>1.5</td>
</tr>
<tr>
<td>7</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Total responses: 392
15) Do you consider yourself to be physically fit?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>48.8%</td>
<td>191</td>
</tr>
<tr>
<td>no</td>
<td>51.2%</td>
<td>200</td>
</tr>
</tbody>
</table>

Total responses: 391

16) On a 1-10 scale, with 1 being completely sedentary and 10 being a professional physical trainer, where would you rank your level of fitness?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.5%</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>3.6%</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>13.0%</td>
<td>51</td>
</tr>
<tr>
<td>4</td>
<td>12.5%</td>
<td>49</td>
</tr>
<tr>
<td>5</td>
<td>20.7%</td>
<td>81</td>
</tr>
<tr>
<td>6</td>
<td>20.9%</td>
<td>82</td>
</tr>
<tr>
<td>7</td>
<td>18.9%</td>
<td>74</td>
</tr>
<tr>
<td>8</td>
<td>7.9%</td>
<td>31</td>
</tr>
<tr>
<td>9</td>
<td>1.0%</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>0.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Total responses: 392

17) Do you often feel guilty about your level of fitness?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>47.4%</td>
<td>186</td>
</tr>
<tr>
<td>no</td>
<td>52.6%</td>
<td>206</td>
</tr>
</tbody>
</table>

Total responses: 392

18) In the last three years, how many times have you attempted a food restriction diet?

<table>
<thead>
<tr>
<th>Attempted</th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>43.6%</td>
<td>171</td>
</tr>
<tr>
<td>1</td>
<td>18.1%</td>
<td>71</td>
</tr>
<tr>
<td>2</td>
<td>15.6%</td>
<td>61</td>
</tr>
</tbody>
</table>
19) If you have attempted a food restriction diet in the past three years, what were your results (amount of weight lost, did you keep it off, etc.)?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I haven't attempted a diet</td>
<td>42.1%</td>
<td>165</td>
</tr>
<tr>
<td>Other</td>
<td>57.9%</td>
<td>227</td>
</tr>
</tbody>
</table>

Total responses: 392

20) If you were given a free fitness program that could be adapted to exactly where you are right now (taking into consideration your fitness level, your budget, and your access to fitness equipment), what would your interest level be? (1 = no interest, 5 = sign me up)

<table>
<thead>
<tr>
<th>Interest Level</th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12.8%</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>9.4%</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>20.2%</td>
<td>79</td>
</tr>
<tr>
<td>4</td>
<td>24.7%</td>
<td>97</td>
</tr>
<tr>
<td>5</td>
<td>32.9%</td>
<td>129</td>
</tr>
</tbody>
</table>

Total responses: 392

21) Do you have any hesitations about going to a health club/gym? If yes, choose all that apply.

<table>
<thead>
<tr>
<th>Hesitation</th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>25.3%</td>
<td>187</td>
</tr>
<tr>
<td>Yes</td>
<td>17.3%</td>
<td>128</td>
</tr>
<tr>
<td>Cost</td>
<td>23.7%</td>
<td>175</td>
</tr>
<tr>
<td>Driving Distance</td>
<td>7.7%</td>
<td>57</td>
</tr>
</tbody>
</table>

Total responses: 392
22) Would you be more likely to stick with a fitness program at home or in a gym?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>45.7</td>
<td>179</td>
</tr>
<tr>
<td>Gym</td>
<td>54.3</td>
<td>213</td>
</tr>
<tr>
<td>Total responses:</td>
<td>392</td>
<td></td>
</tr>
</tbody>
</table>

23) Would you be more likely to stick with a fitness program with a partner or on your own?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>With a partner</td>
<td>63.0</td>
<td>247</td>
</tr>
<tr>
<td>On my own</td>
<td>37.0</td>
<td>145</td>
</tr>
<tr>
<td>Total responses:</td>
<td>392</td>
<td></td>
</tr>
</tbody>
</table>

24) Since working out at home is a great option, what would keep you from investing $500 in a home gym that could fit in the corner of a bedroom (a 6 foot by 6 foot space)? Choose all that apply.

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not want to exercise at home</td>
<td>14.5</td>
<td>83</td>
</tr>
<tr>
<td>Cost</td>
<td>37.3</td>
<td>214</td>
</tr>
<tr>
<td>Space</td>
<td>33.5</td>
<td>192</td>
</tr>
<tr>
<td>Other</td>
<td>14.7</td>
<td>84</td>
</tr>
</tbody>
</table>
25) Does your church have roughly $500 to spend on a home gym and space to put it?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38.0</td>
<td>149</td>
</tr>
<tr>
<td>No</td>
<td>33.7</td>
<td>132</td>
</tr>
<tr>
<td>Money yes, space no</td>
<td>15.6</td>
<td>61</td>
</tr>
<tr>
<td>Space yes, money no</td>
<td>12.8</td>
<td>50</td>
</tr>
</tbody>
</table>

Total responses: 392
APPENDIX TWO

Defense Slide Presentation

A Fitness Model For Pastors

Chapter One: Introduction

Basis for the Choice of Topic

- My pastor father’s health.
- My determination not to compromise my health or family life for ministry.
- Pastors need help with health and fitness, an area for which I have love, knowledge, experience, and a desire to help.
Statement of the Problem

- Americans’ health problems are largely the result of laziness and gluttony.
- Americans are more unfit and overweight than ever before and nutritionally related diseases are at an all-time high.
  - 300,000 deaths are attributed to obesity annually.
  - Nearly 65% of Americans are overweight or obese.
- Almost 80% of Americans fail to meet the basic physical activity recommendations.
  - 60% of Americans are sedentary.
  - Technological advances have made us lazy.
- Poor fitness brings emotional pain, not pleasure. The most popular New Year’s Resolution year after year is to lose weight/get in better shape.
- The health of American pastors mirrors that of the average American, and some studies show that pastors’ health is worse.
  - Pastors think less of their physical body than any other part of their being, and less of fitness than the general population.
  - Pastoring is sedentary and church culture often involves food.
  - Pastoring is stressful.
  - Such stressful and hectic lives leave little time, desire, or energy for exercise, and obviously unfit and unhealthy pastors give the impression of undisciplined personal lives.
James 3:1 Dear brothers and sisters, not many of you should become teachers in the church, for we who teach will be judged more strictly.

Dr. Howard Hendricks of Dallas Theological Seminary used to tell his students, “Overeating is the one acceptable sin in evangelical Christian circles.”

This is a strength training based fitness program that involves non-drastic lifestyle and dietary changes which can be followed by anyone, regardless of current fitness level. Pastors will learn to make real, measurable, and sustainable improvements to their health, fitness, and appearance in as little as one hour per week.

Theoretical Basis for the Project

The Bible does not give a direct command to exercise, but it does say enough to support a Biblical principle of making our health and fitness an area of responsibility and concern.

1 Timothy 4:8 “Physical training is good, but training for godliness is much better, promising benefits in this life and in the life to come.”

1 Corinthians 6:19-20 “Don’t you realize that your body is the temple of the Holy Spirit, who lives in you and was given to you by God? You do not belong to yourself, for God bought you with a high price. So you must honor God with your body.”

Ephesians 2:10 says, “For we are God’s masterpiece. He has created us anew in Christ Jesus, so we can do the good things he planned for us long ago.”

Romans 12:1 says that we worship God by offering our bodies to Him. We are to present our bodies to Him as a living, pure, and acceptable sacrifice. We must offer God our very best, and anything less is unacceptable.
Chapter Two: Fitness Facts: Understanding Fitness

Countering Popular Fitness Myths

There are many, but here are a few truths:
- Body weight is the least important tool for measuring fitness progress.
- Many people believe their diet and fitness level are much better than they really are.

- Fitness can’t be attained quickly.
- Genetics don’t limit a person’s ability to get fit.

Fitness Benefits

- Reduces the risk of all sorts of health problems like heart disease, cancer, stroke, high blood pressure, diabetes, gallstones, PMS symptoms, back pain, arthritis pain, varicose vein pain, high cholesterol, and tension headaches.
- Builds bone and reduces the risk of bone, joint, and muscle injuries.
- Reduces injury and surgery recovery times.
Strengthens the immune system.

Improves metabolism and lowers the body weight set point.

Increases life expectancy and productivity.

Improves sleep and increases energy.

Saves money

Sets a good example.

Fitness and Body Types

- Three body types and several combinations.
  - Ectomorph - thin
  - Mesomorph - muscular
  - Endomorph – round or curvy (females)

Fitness and Age

- Getting older does not necessitate feeling older, losing strength and vitality, or limiting physical activities.

- Research shows that people as old as one hundred can dramatically increase their strength, improve their balance, restore bone density, moderate diabetes, and diminish joint pain in just a few weeks of weight training.
Chapter Three: The Connection Between Diet and Fitness

- Diet assists fitness, but diet cannot bring fitness by itself.
- Dieting is not the solution to fitness or even weight loss, and it sets up most people to fail. 95% of people who lose weight gain it back again.
- The key to losing weight is not dieting hard for a few weeks, but changing eating habits permanently.

- One pound of body fat represents 3,500 calories.
- Some easy diet changes are given that bring slow, steady, and maintainable weight loss, without feeling hungry or deprived. The major change is with beverage choice. Never drink a useless calorie.

Metabolism

- Products that claim to boost metabolism are readily available, but they are all cons.
- Resting Metabolic rate is the number of calories a body needs to maintain its vital functions.
- RMR is directly related to muscle mass: the more muscle, the higher the RMR. Strength training is the most effective way to increase muscle mass, and therefore, metabolism.
Every added pound of muscle burns ten to fifteen calories per day on the low end of the scale, and fifty calories per day on the high end of the scale.

Dieting tends to decrease metabolism.

Chapter Four: The Pastoral Fitness Survey

- www.freeonlinesurveys.com
- 392 responses from all fifty states: 344 men and 48 women.
  - Average age is 44, high of 78, low of 20.
  - Average weight is 199 with a high of 323 and a low of 107.
  - All but two believe God cares about our physical fitness.
    - 60% get a yearly physical and 40% don’t.

- 30% do cardio one or zero days per week.
  - 61% do strength training one or zero days per week.
  - 48% do 30 minutes of other forms of exercise one or zero days per week.

- Most ministers had an inflated idea of their physical condition and body composition.

- 60% ADMIT to being overweight to some degree, but looking at height and body weight of each pastor told a different story. In actuality, more than 60% are really overweight but not all will admit it.
Chapter Five: How to Begin A Lifestyle of Fitness

The Right Motivation
- Love for God should be the motivation for fitness.

The Right Expectations
- Do not expect an overnight transformation.

The Right Approach
A fitness program must be started slowly, and failure to do so ends in pain or injury.

The Right Attitude
- We must get rid of our excuses for being unfit.

- Lifestyle changes that promote fitness are discussed: take the stairs; park far away from store entrances; walk the airport during layovers; get off the bus one stop early and walk the rest of the way; walk the dog; do not pay others to wash your car, clean your house, or mow your lawn.

- 49% claim to be physically fit even though 60% admit to being overweight. How likely is that?

- 40% of the 236 ministers who are overweight do not feel guilty about their weight, including 23 of the heaviest 61 ministers surveyed.

- In the past 3 years, 221 ministers attempted at least one diet, and 145 of those are currently overweight.
Chapter Six: The Components of the Fitness Program

Strength Training

- The most important type of exercise.
- Strength training is applying resistance against the bones, joints, and muscles.
- When muscles are not used, they atrophy, or go away.

Cardiovascular Training

- Cardiovascular means “of the heart” and involves the heart, lungs, and blood vessels.
- Anybody can improve their aerobic capacity by following three fundamental guidelines: Work hard enough; work for at least 20 minutes; work three times per week.
- (The 20 minutes (or more) can be done all together or with several shorter sessions.)

Flexibility Training

- Flexibility refers to how the range of motion of a joint.
- Greater flexibility improves blood flow, range of motion, athletic performance, speed, and strength, which result in fewer injuries and falls.
- Warm up to stretch. Cold muscles are stiff and pull or tear easier.
- Anyone can improve their flexibility.
**Partner Up**
- Pros and Cons of working out with a partner are discussed.

**How to Pick A Gym**
- Criteria for picking a gym are discussed.

**Definition of Fitness Terms**
- 26 different fitness terms are defined, which make understanding Chapter 7 possible.

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**Chapter Seven: The Execution of The Fitness Program**
- Every exercise is thoroughly described, and starting and ending positions for every exercise are shown in the Illustrations section at the end of the thesis.

**Dumbbell Squat**

---

**Proper Form and Procedure**
- Four basic but often ignored rules for strength training:
  1. Each joint structure has its own rotation and limitations, which must not be exceeded.
  2. Each exercise movement must be consistent and controlled.
  3. Each exercise should be performed with a slow, consistent increase in tension.
4. All strength training should be done with complete alignment and balance. If an exercise causes a compromise of such posture, too much weight is being used.

- The big muscles should be worked before the smaller, complimentary muscles.

Muscle Groups and Corresponding Exercises

- Legs, back, chest, shoulders, arms, abs

The Fitness Program

- The program I encourage is a 3-day, split routine that combines strength, cardio, and fitness training. Each of the three routines takes around 50 minutes to complete.

- This 3-day routine can be shortened to about 20 minutes per routine, or an hour per week.

Three alternative workouts:

1. 2-Day Split Routine

2. Full-Body Routine – every muscle group is worked in a single workout, two or three days per week.

3. Resistance Tube Workout – can also be used for travel. The entire workout is performed two or three days per week.

- For every workout, exercises are arranged by muscle group. The number of sets and reps are given for each exercise.
ILLUSTRATIONS

Figure 7.1a

Figure 7.1b

Figure 7.2a

Figure 7.2b

Figure 7.3a

Figure 7.3b

Figure 7.4a

Figure 7.4b

Figure 7.5a

Figure 7.5b

Figure 7.6a

Figure 7.6b

Figure 7.7a

Figure 7.7b

Figure 7.8a

Figure 7.8b
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VITA

Kevin L. Elders

PERSONAL
Born: August 31, 1973
Married: Kelley L. Cameron, August 11, 2007

EDUCATIONAL
B.A., North Greenville College, 1996
M.A.P.M., Erskine Theological Seminary, 2004

MINISTERIAL
Licensed: July 24, 1994, Riverside Baptist Church, Greer, SC
Ordained: August 6, 2006, Living Way Community Church, Greer, SC

PROFESSIONAL
Youth Minister, Riverside Baptist Church, Greer, SC, 1997-1998
Youth Minister, Temple Baptist Church, Ninety Six, SC, 1999-2003
Youth and Family Pastor, Victor Baptist Church, Greer, SC, 2003-2004
Associate Pastor and Youth, Living Way Community Church, Greer, SC, 2004-present