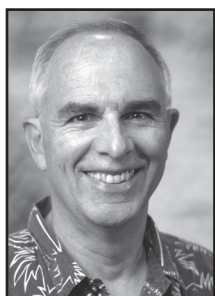


Adopting a Proactive Healthy Lifestyle

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Dr Mitroka earned a BS in Chemistry from Michigan State University, and a PhD in Pharmacology and Toxicology from Rutgers University. Prior to joining Palm Beach Atlantic University, Jim worked for Bristol-Myers Squibb as a research group leader, conducting studies to determine the metabolic fate of experimental drugs. Jim's experience includes in vivo and in vitro studies involving stable and radioactive isotopes.

As a faculty member in the Gregory School of Pharmacy, Jim is working with others to establish meaningful research in the pharmaceutical sciences on campus. He teaches pharmacology and medicinal chemistry portions of the curriculum. Jim is thankful for the opportunity to work with pharmacy students and to share with them how science can be used to improve healthcare. His goal as professor is to follow the example of Christ in helping students develop into all that God meant for them to be; intellectually, emotionally, and spiritually. For enjoyment, Jim enjoys rollerblading, aerobics, body surfing, and digital photography. He believes wholeheartedly that the Bible is the inspired truth of God and depends on it, along with prayer and the guidance of the Holy Spirit, for answers and direction in life. Jim finds that the study of the natural world presents compelling evidence for faith in the God of the Bible. Jim lives in the West Palm Beach area with his beloved wife of over 30 years, Rosemary. Rosemary and Jim have three adult children with whom they love to spend time.



Dr. Wahba graduated from Alexandria University, College of Pharmacy with a BS in Pharmacy & Pharmaceutical Chemistry. After his graduation, he purchased his own drug store in the same city, where he practiced retail pharmacy. Dr. Wahba joined Duquesne University, School of Pharmacy, in Pittsburgh as a research associate. After earning

his Ph.D. in pharmacology and toxicology in 1972, he worked as a forensic toxicologist at the crime laboratory of Allegheny County. In August 1995, Dr. Wahba and his family moved to Hamilton Ontario, Canada where he established and worked as a manager of the first Drug Information Center at McMaster Medical Center. He returned to Pittsburgh in September 1997 and re-joined the Allegheny County Crime Laboratory to work as a forensic toxicologist. He was promoted to the position of manager of the toxicology section and continued serving there for thirteen years. During his tenure as a forensic toxicologist, Dr. Wahba taught pharmacology and toxicology on a part-time basis at two universities and one college in the Pittsburgh area. Dr. Wahba is still available as a forensic toxicology expert witness in civil and criminal court cases. He is a diplomat of the American Board of Forensic Toxicology.

Since August 2001, Dr. Wahba has been a faculty member at Palm Beach Atlantic University as an associate professor. He thoroughly enjoys teaching at a Christian School of Pharmacy where integration of faith is an integral part of the curriculum. He serves as the Director of Spiritual Programs at the school. His teaching responsibilities include co-teaching in the "Pharmacotherapy" courses as well in "Principles of Drug Action I & II". He also teaches in the areas of spirituality in healthcare and clinical toxicology.

Introduction-The importance of healthy lifestyle

As a pharmacist, what do you think of as the best way to minimize the ravages of disease on health? As pharmacists and pharmaceutical scientists, our focus is often on drugs and medical therapy. Largely because of our background and training, we naturally look to products found in a bottle as solutions to illness. Likewise, we tend to think in terms of treating existing illnesses rather than preventing them in the first place. And this idea carries over to other health care professionals, including physicians.

But this situation is unfortunate, since many – indeed most – of the chronic diseases that plague our society are largely the result of poor lifestyle choices. In other words, they are avoidable or at least “delayable”. A recent review published in *Archives of Internal Medicine* states that four simple lifestyle factors - never smoking, maintaining a healthy weight, exercising regularly and following a healthy diet—together appear to be associated with as much as an 80% reduction in the risk of developing the most common and deadly chronic diseases.¹ Lifestyle has been associated, to various degrees, with Alzheimer's disease, atherosclerosis, asthma, some kinds of cancer, chronic liver disease or cirrhosis, chronic obstructive pulmonary disease, Type 2 diabetes, heart disease, metabolic syndrome, chronic renal failure, osteoporosis, stroke, depression and obesity.

While drug therapy is important, we need to be mindful that, for most diseases, drugs are adjunct treatment, rather than first-line approach to treatment. Most of the public health measures that have lowered the incidence of infectious diseases have resulted from better sanitation or even the simple act of thorough hand-washing. In the same way, some non-western populations live long and healthy lives with little or no availability of medications, as is so well documented in the book, “Blue Zones.”²

Why is Healthy Lifestyle Important?

The psalmist tells us that we are “fearfully and wonderfully made” (Psalm 139:14, NIV). As Christians, the importance of making proper lifestyle choices is a fundamental part of our faith. The scripture: “You were bought at a price, therefore honor God with your body” (1 Corinthians 6:20, NIV), means more than simply avoiding sexual sins. As healthcare professionals, we know at a very deep level the meaning of being created in God's image (Gen-

esis 1:27), and it is incumbent on us to respect the creator by taking care of the one body he has entrusted to each of us. What is equally marvelous is how closely in keeping a healthy lifestyle is a manifestation of living a Godly life as described by the Bible. A lifestyle that results in better health is a great witness that we respect and obey God's exhortation concerning our bodies.

What are some of the Keys to Healthy Lifestyle?

So, what are these lifestyle factors that are key to better health? Of course the list is endless, but we can focus on three key factors: proper diet, exercise, and rest. We have intentionally left out non-smoking from the list, since this goes without saying to any health professional! Also, you may notice that "maintaining a proper weight" is not listed as a factor. For the most part, eating a healthy spectrum of foods and getting adequate exercise takes care of this automatically. Now let's look at each factor individually.

Diet

The first and possibly most important factor is diet or, simply put, eating right. With respect to diet, it is interesting to note that the traditional Atkins style diet, which shuns carbohydrates and favors meats and fats, has largely been put to rest. The Bible speaks highly of bread from many writers of the Old Testament. Jesus even calls himself "the bread of life" (John 6:35-a, NIV), an analogy indicating that bread is a staple of life.

The Bible has many references to food, but two that are particularly relevant are the approbation against gluttony (Philippians 3:19) and the story of Daniel and the three Hebrew trainees who asked to have vegetables in place of the King's rich meals. The overall message from this passage in Daniel 1:12-13 is that we are to eat primarily plant-based foods and eat amounts of food that are in moderation. Actually the diet of our Lord, now referred to as "the Mediterranean diet" which is characterized by eating fruits and vegetables, unsaturated oils (i.e., olive, canola) and fish, has been shown to have numerous health benefits. One study, the Lyon's heart study, showed that adherence to such a diet lowered the incidence of cardiac events by 70% relative to the low-fat diet recommended by The American Heart Association (AHA).³

The Bible goes on to give us two other caveats regarding diet. One is that salt is acceptable, even vital in small quantities. Consider the scripture: "Let your conversation be seasoned with salt" (Colossians 4:6, NIV *paraphrased*).

Also, Jesus said: "You are the salt of the earth" (Matthew 5:13-a, NIV). The other is that alcohol, in moderation, is acceptable and perhaps even beneficial, as Paul instructs in 1 Timothy 5:23. Many studies have also supported that wine, in moderation, has a distinctly protective effect against cardiovascular disease and Alzheimer's Disease.⁴

Exercise:

The next area is exercise. Here the scripture says relatively little, but a consideration of the life of Jesus, and the long distances he traveled by foot along the hilly terrain of Galilee and the surrounding areas, suggests a lifestyle characterized by movement. Also, Paul in his letters frequently mentions 'running the race' (1 Corinthians 9:24, NIV) and 'physical training' (1 Timothy 4:8, NIV). Most studies suggest that 30 minutes of moderately intense exercise, like a brisk walk, most days of the week, is a good place to start.⁵ Activities such as walking, biking, hiking, and gardening, a few minutes here and there throughout the day provide most of the cardiovascular benefit of an intense workout at the gym. Also, exercises that provide resistance to the major muscle groups two to three times a week help strengthen bones and muscle.⁵ The key to exercise is finding a way to make it enjoyable, or at least less burdensome! Biking, hiking, gardening, and other activities that get you out and moving in God's world provide you with exercise while bringing joy, peace, and a closeness to the Creator.

Rest

The last area of concern is rest, and by this we mean enjoying freedom from stress (at least for some time during the week) and getting adequate sleep. While short-term stress is a natural part of the human condition, say in response to a test, a car accident, or some other challenging event, long-term stress can cause significant harm to the body. Long-term stress results in chronic elevations in circulating cortisol and epinephrine levels. The result is familiar to any pharmacist because they virtually mirror the adverse reactions of long term corticosteroid elevations: weakness of the bones, thinning of the skin, derangement in intermediary metabolism, heightened susceptibility to infection, and ulcers. In addition, stress is a factor in heart disease. Coping with stress is challenging, but as Christians we need to turn over our fears and worries to the Lord. The discipline of having a special place and time for daily, quiet meditation on God's word and quiet time with God in prayer can go a long way to distressing our lives and filling our Spiritual 'tanks' (Mark 1:35,

NIV). It's also helpful to get rid of the frivolous and unimportant activities that steal our time and leave us feeling rushed and spiritually and emotionally depleted. The special time we spend seeking God's plan for our lives, meditating on His Word, and planning our day according to His priorities can also help de-stress and can actually bless our busy day. Jesus was very clear in emphasizing that we should not allow ourselves to become stressed. Consider His words: "Do not let your hearts be troubled" (John 14:1, NIV), and "Do not be anxious for your life" (Matthew 6:25, NIV). Also, consider His example: "After He dismissed them, He went up on a mountainside by Himself to pray" (Matthew 14:23, NIV). We are to trust the Lord and make effort to be at peace. Part of each day, and even one entire day each week (as stated in Exodus 35:2), should be set aside for such rest, serving as a 'Sabbath' from the everyday activities of life.

And lastly, getting a good night's rest, in terms of both the quality and the quantity of sleep, is a key element of rest in a healthy lifestyle. Seven hours of sleep, on a regular basis, is a good guideline. It is also important to maintain a regular sleep schedule so that the body can develop a regular rhythm of activity and rest.

Conclusion

The benefits of a healthy lifestyle are enormous. Taking care of ourselves not only helps us to serve others more fully, but it also provides an example and witness of our faith. It reflects a character of commitment and discipline. It shows that we honor God by taking care of his handiwork – our bodies. Jesus' exhortation of loving God and loving others as we love ourselves (Matthew 22:38-39) is a great guide for a healthy lifestyle. We love God by getting to know Him more each day as we spend time with Him, letting our love for Him flow through us to love others. How can we "love others as we love ourselves" if we don't even take care of the magnificent gift God has given us in our own bodies?

If you are interested in getting started with improving your lifestyle, there are a number of Christian organizations with workshops and websites that can help, including "Thin Within", "Weigh Down Ministries" and "Faithfully Fit". Also, feel free to write to us (the authors) if you have any thoughts to share or would like to know more about the subject.

So, as we began with a question we conclude with another. Given that the lifestyle described above promotes a long and healthy life, we still have to ask, why both-

er? Let's be honest, eating right, exercising, and getting enough sleep when we want to catch that late night TV show all requires discipline. But the Lord's Word tells us that while no discipline is pleasant at the time, later, it brings a harvest.

When we take care of our physical bodies, we free our mind to focus on the important things – heavenly things. We minimize the physical encumbrances that can interfere with our abilities to serve others. And of course we honor the Lord by showing that we care about His creation - our physical being, and we provide an example to others to do likewise. The Bible tells us in Jeremiah 29:11, that the Lord has plans for us. While we do not know the details of His plans, we are expected to be ready to carry them out as they are revealed to us. Let us be ready in all ways, including our physical life, to do just that.

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