Two of physical therapy's finest combine their expertise and collaborate on a one-of-a-kind book
By Beth Puliti

Marilyn Moffat, DPT, PhD, PT, and Carole B. Lewis, DPT, PhD, PT, are recognized as two of the top physical therapists in the country. Combined, they have years of academic and clinical work experience and are human body experts. ADVANCE had the opportunity to speak with Dr. Moffat and Dr. Lewis about the collaboration on their new book, Age-Defying Fitness: Making the Most of Your Body for the Rest of Your Life.

ADVANCE: Why did you decide to collaborate on this book?

Dr. Moffat: I had written a book for APTA called APTA Book of Body Maintenance and Repair. About two years later, Carole asked me if I would consider doing another book, and I agreed. After a little bit of a slow start, we went full speed ahead and so what you see now is the product of a couple years of work.

Dr. Lewis: There were books on exercise that were selling, and they weren't written by physical therapists. I knew Marilyn had written a book before and because of her expertise I thought that she would be the perfect person to work with.

ADVANCE: How did you become interested in the Baby Boomer population and what is your background with this generation?

Dr. Moffat: I've been there and am there. I have a mother, who has had multiple fractures due to osteoporosis, major joint problems due to osteoarthritis and a previous myocardial infarction. My father died of cardiovascular disease. It doesn't take too much awareness to realize that exercise for me is a necessity, not a choice. And I came from a very strong exercise background. I was a physical education teacher before I became a physical therapist, so I had the exercise knowledge that so many physical therapists lost when we went to the baccalaureate level education. My treatment programs for all of my patients and clients, whether they are 35 or 95, have always had primary exercise and education components. The research data supporting the efficacy of exercise is probably the strongest we have in the entire practice arena. And I have had too much experience with aging individuals not to know the incredible importance of exercise for this population.

Dr. Lewis: Geriatrics is my area of expertise, so I've always had a strong interest in the aging population. My big fear is what will happen if we're not prepared when the Baby Boomers move into the geriatric demographic. I see this book as an effort to be ready for the emergence of that group and to educate people ages 40 and older about these forms of exercise. I've always believed that physical therapists need in-depth knowledge of exercise, more than any other subject area. We are the exercise experts, and we need to make sure everybody knows that. We can look at exercise from all the critical perspectives, whereas I think other disciplines are more limited in their view. We hope this book will call attention to our profession and increase our profile with the public.

Dr. Moffat: While we came to this writing with individual perspectives, the book is a total collaborative effort.
ADVANCE: Explain why a book for the aging Baby Boomer population is timely.

Dr. Moffat: Well, there are an estimated 78 million Baby Boomers and the oldest has just turned 60 this year while the youngest is 42. We believe this book is probably more timely than the multiple other books that are on the market related to exercise for individuals in this age group. First of all, most of the exercise books are written for the younger population. The models in our book are all Baby Boomers or older. We did not use 20-year-olds with perfect bodies for a reason. Very few individuals look like that when they’re 40, 50, 60, 70 or 80 years old.

Dr. Lewis: But more importantly, we decided that when we developed the outline of the book, we were going to give people tools to assess their starting capabilities. The book is categorized by domains of fitness. In each domain there are tests that readers can perform to see where they are and then also track their progress.

ADVANCE: Briefly explain what this book is about.

Dr. Moffat: We determined what people needed to know about fitness. We came up with five domains: posture, strength, balance, flexibility and endurance. The book begins with a general self-assessment. This allows readers to determine where they are really fit and where they need work.

Posture is the first domain, which many books don’t cover. People learn a little bit at school, but there really is a lot to know about posture because it affects many areas. Posture is probably one of the most overt examples of body changes that we see with the Baby Boomer population, particularly because they are often working on computers, which alters their head and upper-back alignment. In the book, readers evaluate their posture, and then there are very specific exercises for correcting it. Studies have shown that one can be very active—run or weight lift, for example—and it has no effect on posture. A person must do specific exercises to change his or her posture.

Dr. Lewis: Strength is the domain that follows posture. We take a look at every muscle group in the body and do a strength test for each group: the arms, legs and back. Then there are specific exercises for each of these body areas. Many people misunderstand strength. They think if they walk, they are strong. The reality is people can be marathon runners and be weak in their hip abductors or in their upper body. Unlike the rest of the chapters that offer eight exercises, the strength chapter includes 24 exercises: eight for the arms, eight for the legs and eight for the trunk. We couldn't find just eight exercises that would have taken care of the whole body, so we broke it up into parts. We have also included the Theraband in this chapter. Readers can test their strength with the elastic band, and they can also perform strength-training exercises with the elastic band if they do not have weights.

The next two domains are balance and flexibility. Flexibility is probably the most neglected area in fitness. We all need to stretch, and if we don’t we’re going to end up very tight. Both the balance and flexibility domains have tests and exercises as well.

Dr. Moffat: Unlike the rest of the chapters, the last domain—endurance—offers not only a test in the beginning where people can begin to assess where they are, but also eight different modes of aerobic capacity endurance conditioning exercises. Readers have a choice; if they want to perform an exercise in the walk category, they can walk, jog, use a treadmill or an elliptical machine. Anything that simulates the walking maneuver in some way or another is fine. They can choose to exercise on a bicycle, whether it’s an outdoor bike where you go up and down the hills and enjoy the outdoor scenery, a regular upright stationary bike or a recumbent bike. They can also choose to jump rope, row, exercise in the water, or use stepping machines or stairs. There are eight categories of aerobic fitness from which readers can choose in order to condition their heart, lungs and vascular systems.
Each chapter also includes helpful hints that can be incorporated into one's daily living to reinforce each of the five domains. At the end of the book, we conclude with a discussion about motivation.

**ADVANCE:** There are many self-assessment tests in the book. Are these tests the same tests PTs use to perform assessments of current fitness levels?

**Dr. Moffat:** Yes, they are; in fact, we don't think there is one test in the book that isn't used in a clinic somewhere. We tried to use many tests that are standard and that have reliability, validity and norms established. We have not seen another book that has this type of format for the lay audience, and we hope that the assessments will provide major incentives for readers to maintain the exercise regime. We don't see these assessments replacing the need for physical therapists in any way, however. It is our hope that with a greater understanding of our knowledge base and skills as illustrated in this book, the public will look to PTs for advice and consultation.

**ADVANCE:** How can exercise programs in the book be tailored to the reader's specific needs?

**Dr. Lewis:** Once readers find their area(s) in need of change, we direct them to the exercises that are specific for the problem. So, for example, they may have great posture, but they might be a little stiff in their hips. In this case, they would want to do one or two of the posture exercises, but perhaps seven or eight flexibility exercises. Readers can design their own program based on the tests taken and what the results were. Even if they score extremely well in all of the tests, we still offer them a challenge to assure that they maintain their fitness with increasing age. There are a lot of safeguards in the book, such as warnings and the importance of noting any signs or symptoms, and to be sure to contact either their physical therapist or physician if they are noted.

People get themselves in trouble when they start an exercise program because they do too much without knowing where they are. This book gives the public a way to understand where they are and how to begin gradually and carefully so that they don't overdo it.

**ADVANCE:** Why did you feel there was a need for a book written by PTs for general consumers?

**Dr. Moffat:** The public unfortunately goes to exercise classes, to trainers and to all sorts of fitness people who have no clue about the anatomical and physiological changes and considerations that need to be made when prescribing exercises for aging adults. That's why physical therapists are the key people in terms of fitness. We have an educational background and skills that others do not have. Our input into appropriate exercise from the earliest age will hopefully preclude so many of the exercise-related problems that we see in our practices.

**Dr. Lewis:** This book will also be a great asset to our patients and clients in our clinics and practices, even when we might be seeing them for a problem unrelated to their fitness needs. Physical therapists will be able to hand them the book when they want to embark upon a fitness program in a very safe way. In addition, they can also point them in the right direction of correct exercises for each of the domains.

**ADVANCE:** What is the intensity level of the exercises in this book? Would the average Baby Boomer be able to benefit from the exercise suggestions?

**Dr. Moffat:** The intensity level goes from the simplest to the more difficult. It covers all of the five domains of fitness, not just one of them. There is no doubt that the marathon runner will benefit from the posture and flexibility sections and perhaps even from the upper-body strength section.
The deconditioned individual will benefit from all the chapters in the book. The beauty of the book is that readers determine where they are in each domain and then begin to change those domains that need to be changed and maintain those domains where they have scored perfectly.

Beth Puliti is editorial assistant at ADVANCE. She can be reached at epuliti@merion.com