

Your Guide to Functional Anatomy in Yoga

THE KEY POSES Y () () A

RAY LONG, MD, FRCSC



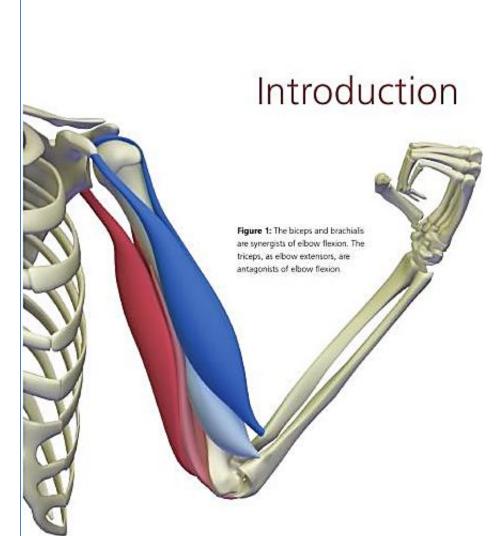






Table of Contents

Introduction
How To Use This Book
Part One: Theory1
Biomechanics of Stretching2
Physiology of Stretching10
Muscle Spindle12
Reciprocal Inhibition16
Golgi Tendon Organ18
Combining Biomechanics
and Physiology22
Muscle Awakening24
Recruitment and Bandhas30
The Ten Bull Pictures32
Part Two: Practice35
Preparatory Poses36
Sun Salutations50
Standing Poses54
Hip Openers87
Forward Bends99
Twists121
Back Bends131
Arm Balances147
Inversions165
Restorative Poses
Appendices
Guide to Body Movement190
Index of Anatomy202
Index of Poses212



My first spiritual teacher, author and mystic Robert A. Johnson, taught me to "look at what is." He was speaking about life in general, and his advice applies to the practice of Hatha Yoga as well.

Throughout our first book in this series, "The Key Muscles of Hatha Yoga," we illustrate the relationship between form and function for the bones, joints, ligaments, and muscles. Similarly, looking at the form or shape of any given Yoga pose reveals its unique function.

Individual joints have a number of specific muscles that create movement. Look at Figure 1 to see how activating the biceps and brachialis muscles flexes the elbow and lengthens the muscles that oppose this action—those at the back of the upper arm, the triceps.

Individual Yoga poses have specific groups of muscles that work together to create optimal form. I call these muscle groups the synergists of the pose. You can deepen and stabilize a pose by activating these muscles.

Look at Figure 2 to see this concept in action with the standing pose Prasarita Padottanasana. This image illustrates how contracting the muscles at the front of the thigh, hip, and torso—the quadriceps, psoas, and rectus abdominis—deepens the pose and stretches the opposing muscles at the back of the thigh and buttocks and along the spine. This is how combining the synergists in a Yoga pose creates the optimal functional benefit for the practitioner.

Yoga poses are like "keys" that unlock our conscious awareness of the body. Forward bends stretch and release the structures on the back of the body, while strengthening the muscles on the front of the body. Back bends have an opposite effect, and so on for the different categories of poses. Knowledge of the functional anatomy of Yoga reveals the mechanisms behind these processes.

"The Key Poses of Hatha Yoga" is intended to be a visual reference for the practitioner to aid in his or her individual journey. It illustrates 55 of the fundamental poses of Hatha Yoga, the suggested positions of the major joints and muscles that contract to create these key positions, as well as the muscles that stretch in the various poses. Part One of "The Key Poses of Hatha Yoga" illustrates the science behind the biomechanics and physiology of stretching muscles. Part Two applies this knowledge to the various categories of poses to unlock the benefits.

Practicing Yoga is an exploration of our individual bodies. Bear in mind that there are many interpretations of the poses. There are also variations for the postures, depending on the system of Hatha Yoga and the experience of the practitioner. Enjoy your practice and seek out your own "best" interpretations. Find out what works for you in opening the door to your individual experience of Yoga.

Namasté

Ray Long, MD, FRCSC

