

# Contents

<b>Preface .....</b>	<b>xi</b>
<b>SECTION 1: UNDERSTANDING THE KNEE</b>	
<b>Chapter 1: Anatomy of the Knee.....</b>	<b>3</b>
Bones and Articulating Surfaces .....	4
Passive Stabilizing Structures.....	7
Active Stabilizing Structures.....	12
Summary .....	14
<b>Chapter 2: Common Causes of Knee Injuries.....</b>	<b>15</b>
Biomechanical Alignment.....	16
Suboptimal Muscle Function and Strength .....	17
Poor Mobility at Adjacent Joints .....	18
Poor Strength in Surrounding Musculature .....	19
Excessive Tension in Surrounding Muscle and Fascia.....	19
Flat-Out Overuse .....	19
Types of Knee Injuries.....	20
The BIG Question .....	22
Common Misconceptions about Knee Rehabilitation.....	24
<b>Chapter 3: The Bulletproof Knee Program Overview .....</b>	<b>27</b>
Ten Things You MUST Do to Keep Your Knees Healthy .....	28
<b>SECTION 2: STRENGTH TRAINING AND THE HEALTHY KNEE</b>	
<b>Chapter 4: The Gluteals.....</b>	<b>33</b>
Functional Anatomy .....	36
Assessment.....	38
Training .....	40
Summary .....	43
<b>Chapter 5: The Posterior Chain .....</b>	<b>44</b>
Functional Anatomy .....	44
Training .....	50
Summary .....	53
<b>Chapter 6: The Quadriceps .....</b>	<b>54</b>
Functional Anatomy .....	54
Training .....	58

Summary .....	62
<b>Chapter 7: Single-Leg Training .....</b>	<b>64</b>
Quad-Dominant Exercises.....	68
Hip-Dominant Exercises .....	72
Summary .....	75

### **SECTION 3: MOBILITY AND THE HEALTHY KNEE**

<b>Chapter 8: Hip Mobility .....</b>	<b>79</b>
Definitions of Flexibility and Mobility.....	79
Mobility vs. Stability.....	80
The Joint-by-Joint Approach to Mobility.....	81
Sitting’s Effects on Hip Mobility.....	86
Strategies to Improve Hip Mobility .....	87
Weight Training for Improved Mobility?.....	95
Summary .....	96
<b>Chapter 9: Ankle Mobility.....</b>	<b>98</b>
Ankle Mobility.....	99
Ankle Mobility Drills .....	101
Summary .....	105

### **SECTION 4: SOFT TISSUE AND THE HEALTHY KNEE**

<b>Chapter 10: Soft-Tissue Length .....</b>	<b>109</b>
Dynamic Flexibility.....	110
Static Stretching .....	113
Eccentric Quasi-Isometrics (EQI’s).....	118
Summary .....	121
<b>Chapter 11: Soft-Tissue Quality.....</b>	<b>123</b>
Soft-Tissue Quality to the Rescue!.....	123
Foam Rolling .....	126
Active Release Technique.....	128
Deep Tissue Massage.....	129
Self-Instrument Massage.....	130
Summary .....	132

### **SECTION 5: OTHER FACTORS THAT IMPACT KNEE HEALTH**

<b>Chapter 12: Improving Athletic Ability .....</b>	<b>137</b>
Ballistic Training .....	139
How to Incorporate Ballistic Drills into Your Program .....	140
Basic Plyometric Drills.....	142
Summary .....	145
<b>Chapter 13: Diet and Supplementation .....</b>	<b>147</b>
Improve Acid-Base Status.....	147
Decrease Inflammation.....	148

Supplementation .....	149
Summary .....	152

**SECTION 6: THE NO-MORE-KNEE-PAIN PROGRAM**

<b>Chapter 14: The No-More-Knee-Pain Program.....</b>	<b>155</b>
Core Training .....	156
Phase I: Bad → Ok .....	156
Phase II: Ok → Good .....	163
Phase III: Good → Great .....	168
Add True Force Absorption Work.....	172
<b>Chapter 15: Optimizing the No-More-Knee-Pain Program .....</b>	<b>174</b>
Heat Pre-Workout.....	174
Knee Sleeves vs. Knee Wraps .....	175
SIM Pre-Workout.....	176
Proper Warm-up .....	176
Ice Post-Workout.....	177
Bank Cards for Fluid Drainage.....	178
Summary .....	178
<b>Chapter 16: Closing Thoughts .....</b>	<b>179</b>

**BONUS SECTION: STATIC STRETCHING EXERCISES..... 181**

**BONUS SECTION: FOAM ROLLING EXERCISES..... 195**

**BONUS SECTION: SINGLE-LEG EXERCISES ..... 207**

**About the Author ..... 225**

**References ..... 233**