

Blythe Lucero

THE 100 BEST SWIMMING DRILLS



- IMPROVE YOUR STROKE TECHNIQUE
- DRILLS FOR FREESTYLE, BACKSTROKE, BREASTSTROKE & BUTTERFLY
- NO MORE INJURIES!

MEYER
& MEYER
SPORT

TABLE OF CONTENTS

Introduction10

How to Use this Book11

1. In Pursuit of Efficient Swimming13

 The Art and Science of Swimming.....13

 The Technique of Economic Swimming14

 Turning Workout into Practice15

2. What Drills Are All About17

 What Is a Drill?17

 Types of Swimming Drills21

 History of Swimming Drills22

3. Using Swimming Drills.....25

 When to Use Drills25

 How to Use Drills25

4. THE 100 BEST SWIMMING DRILLS27

DRILLS FOR FREESTYLE28

 Body Position Drills29

 1. Downhill Float.....29

 2. Log Roll31

 3. Twelve Kick Switch33

 Kick Drills35

 4. Toe Point Drill35

 5. Floppy Foot Drill38

 6. Vertical Kicking Sequence40

 7. Single Leg Kicking42



The 100 Best Swimming Drills

Arm Stroke Drills44

 8. Pull/Push Freestyle44

 9. Catch Up47

 10. All Thumbs Drill49

 11. Sculling51

 12. Fist Freestyle54

Recovery Drills56

 13. Floppy Hand56

 14. Shark Fin58

Breathing Drills60

 15. Inhale Arm/Exhale Arm.....60

 16. The Weightless Arm63

 17. Temple Press66

 18. Dead Arm Freestyle.....68

Leverage Drills70

 19. Three Stroke Switch Freestyle70

 20. The Pendulum Effect73

 21. Hip Skating75

Coordination Drills77

 22. Heads Up Freestyle77

 23. Horizontal Rope Climbing.....80

 24. Freestyle with Dolphin82

 25. Bilateral Breathing84

DRILLS FOR BACKSTROKE86

Body Position Drills87

 26. Float on Spine87

 27. Water-Line Drill.....89

 28. Twelve Kick Switch Backstroke92

Kick Drills.....94

 29. Boiling Water Drill94

 30. No Knees Streamline Kick97



Table of Contents

31. Pigeontoed Kicking	99
32. Quarter Roll with Cup on Forehead	102
Arm Stroke Drills	104
33. One Arm Pull/Push	104
34. Up and Over	107
35. Fist Backstroke	109
36. Corkscrew.....	111
Recovery Drills	113
37. Clock Arms	113
38. Two-step Recovery.....	116
39. Locked Elbow Drill.....	118
40. Dog-ears	121
Breathing Drills	123
41. Rhythmic Breathing Sequence	124
42. The Breathing Pocket	126
Leverage Drills	128
43. Three Stroke Switch Backstroke	128
44. One Arm Rope Climb	131
45. Opposition Freeze Frame	133
46. Armpit Lift	135
Coordination Drills	137
47. Roll, Pull, Roll, Push	137
48. Pinkie Lead	140
49. Backstroke Balance Drill with Cup	142
50. Opposition Overlap	145
DRILLS FOR BREASTSTROKE	148
Body Position Drills	149
51. Streamline	149
52. Rocking Drill	152
Kick Drills	155
53. Duck Feet	155
54. Breaststroke Kick on Your Back.....	158



The 100 Best Swimming Drills

55. Vertical Breaststroke Kick	162
56. Heads up Breaststroke Kick	164
Arm Stroke Drills	166
57. 3D Breaststroke Arms	167
58. Breaststroke Sculling	169
59. Half-stroke Breaststroke	172
60. Corners Drill	174
61. Hand Speed Drill	176
62. Breaststroke with Fists	179
Recovery Drills	181
63. Growing Your Recovery	181
64. Shoot to Streamline	184
65. Fold and Shrug	186
Breathing Drills	190
66. Inhale at the High Point	190
67. Eyes on the Water	192
68. Tennis Ball Drill.....	195
Leverage Drills	197
69. Breaststroke with Dolphin	197
70. Breaststroke Alternating Dolphin and Breaststroke Kick	199
71. Stroke Up to Breathe, Kick Down to Glide	202
Coordination Drills	204
72. No Stars	204
73. Stroke, Breathe, Kick, Glide Mantra	207
74. Glide Length/Glide Speed	210
75. Thread the Needle	213
DRILLS FOR BUTTERFLY	216
Body Position Drills	217
76. Taking a Bow	217
77. Weight Shifting	220
Kick Drills.....	222



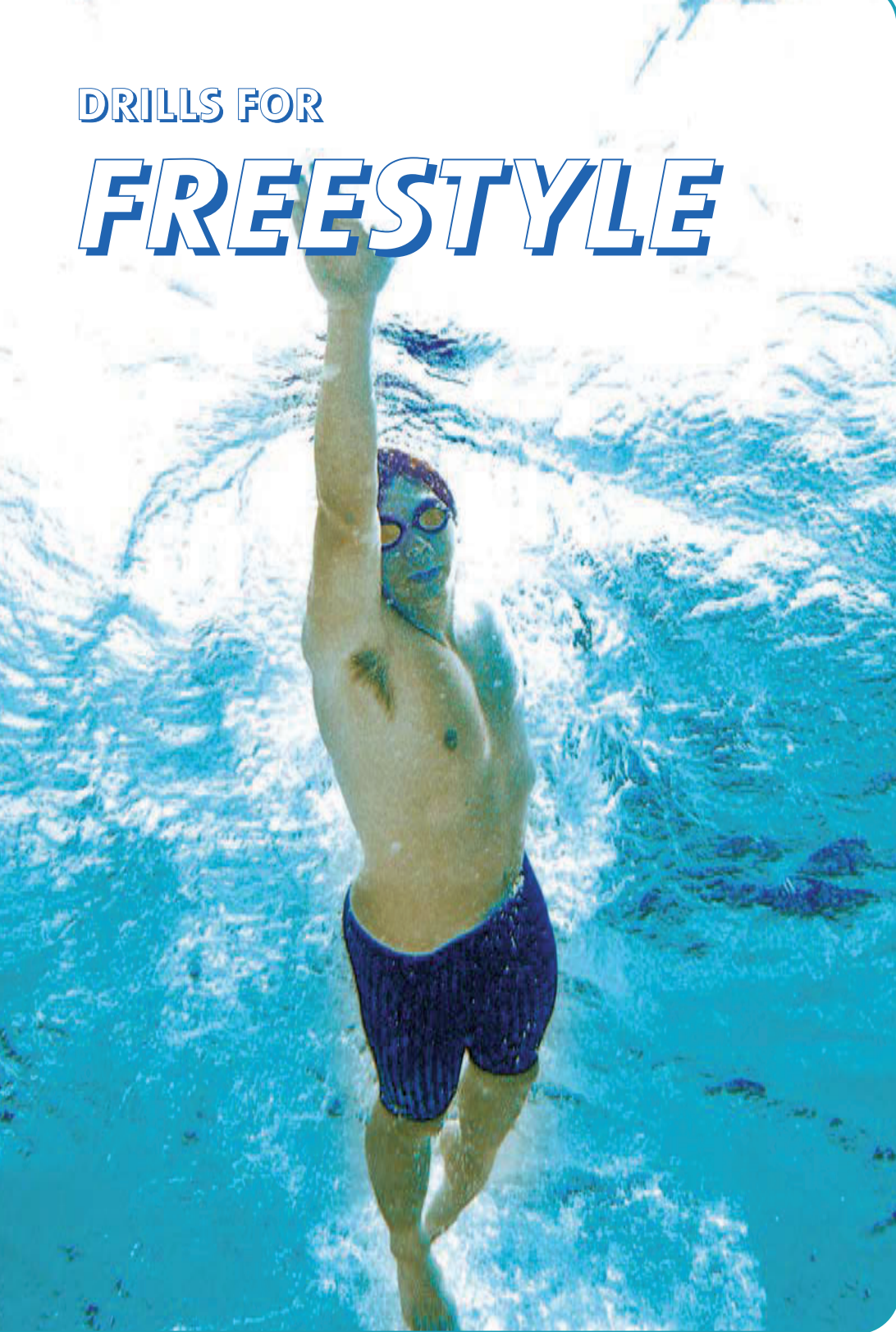
Table of Contents

78. Ribbon Writing	223
79. Deep to Shallow Dolphin	225
80. Dolphin Dives	228
81. Vertical Dolphin	230
82. Back Dolphin	233
Arm Stroke Drills	235
83. Pitch to Press	235
84. Sweeping Question Marks	238
85. One-arm Butterfly.....	240
86. Left Arm, Right Arm, Both Arms	242
87. The Round Off	245
Recovery Drills	247
88. Pinkies-up	247
89. The Flop	250
90. Reaching to a “Y”	252
Breathing Drills	254
91. Breathing Timing Drill.....	254
92. Flying Dolphin Dives	257
93. Eyes on the Water Butterfly.....	259
94. Hammer and Nail	262
Leverage Drills	265
95. Advanced One-arm Butterfly	265
96. No Kick Butterfly.....	267
97. No Pause Fly	270
Coordination Drills	272
98. Chest Balance	272
99. Coordination Checkpoint	274
100. Quiet Butterfly	276
5. Conclusion	279
Credits.....	280



DRILLS FOR

FREESTYLE



BODY POSITION DRILLS

An efficient freestyle is built on good body position. The way we float in the water is affected by our core tension. For a better freestyle, we must learn to shift weight forward, and achieve a “downhill” floating position. The goal of the following drills for body position is to experience an advantageous float and effective core stability.

Downhill Float

1

THE PURPOSE OF THIS DRILL

- Learning to shift weight to achieve a “downhill” floating position
- Understanding the importance of a correct head position
- Feeling effective core tension and stability

HOW TO DO THIS DRILL

Step 1: Float face down in the water, with your arms at your sides, in a head leading position. Don’t attempt any forward motion.

Step 2: Notice your body position. For most people, the legs will soon begin to sink, leaving the swimmer in an “uphill” floating position.

Step 3: To begin correcting this disadvantageous floating position, lower your chin, so you are looking at the bottom of the pool, not forward. For many people, this simple action will have a positive effect on their float, including raising their sinking legs a bit.

Step 4: Now focus on your spine. Make it as straight as possible by contracting your abdominal muscles and pulling your bellybutton in. Learning to achieve and maintain a straight spine through core tension is an important skill that can be applied to all strokes.

Step 5: While holding your core stable, lean forward on your chest. Doing so should allow your hips and legs to rise toward the surface



The 100 Best Swimming Drills

of the water. This is the desirable “downhill” floating position upon which you can build a good freestyle.

Step 6: Stand, breathe and again lay horizontally in the water, face down, this time with your arms extended over your head, hands leading. Look at the bottom of the pool, achieve a straight spine and stable core. Shift your weight forward and feel the “downhill” float.



Figure 1a Downhill Float



Figure 1b Uphill Float



DRILL FEEDBACK CHART

Problem	Modification
My legs still sink.	For some people, either because of densely muscular legs, or low body fat, their legs will tend to sink no matter what. For these people it is all the more important to learn to hold their core in a “downhill” floating position.
I can’t balance on my chest.	Try rotating your shoulders back, and rounding your chest out. Pretend you are standing at attention horizontally. Focus on your breastbone, moving it gently lower in the water.
I can’t breathe.	This drill requires you to hold your breath. When you run out of air, simply stand up and start again.

Log Roll

2

THE PURPOSE OF THIS DRILL

- Maintaining the horizontal axis while rolling
- Accessing power from your core
- Getting comfortable floating “downhill” in a non-flat position

HOW TO DO THIS DRILL

Step 1: Float face down in the water, arms at your sides, head leading, without attempting any forward motion. Achieve a “downhill” float and position your head so you are looking at the bottom of the pool.

Step 2: Maintaining your core tension and head position, roll onto your right side by rotating your right hip and shoulder one quarter turn clockwise. Hold for 5 seconds.

The 100 Best Swimming Drills

Step 3: Maintaining your core tension and head position, roll onto your back by rotating your right hip and shoulder one quarter turn clockwise. Hold for 5 seconds.

Step 4: Maintaining your core tension and head position, roll onto your left side by rotating your right hip and shoulder one quarter turn clockwise. Hold for 5 seconds.

Step 5: Maintaining your core tension and head position, roll back onto your front by rotating your right hip and shoulder one quarter turn clockwise. Hold for 5 seconds.

Step 6: Stand, breathe, then repeat this drill rolling counter clockwise.

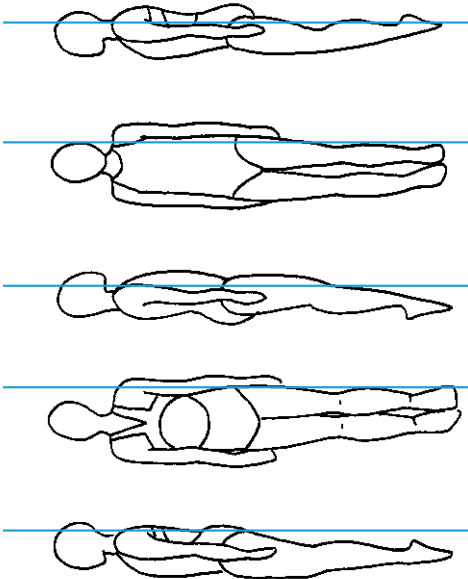


Figure 2 Log Roll



DRILL FEEDBACK CHART

Problem	Modification
I can't get a quarter turn.	Try initiating the turn from the hip and letting your shoulder follow.
My sinking legs get in the way.	You can do this drill with a very light kick if necessary.
I can't breathe.	You can catch a breath when you rotate to your back.

Twelve Kick Switch Freestyle

3

THE PURPOSE OF THIS DRILL

- Maintaining a “downhill” float while moving
- Beginning to feel leverage from the core
- Identifying the longest freestyle position

HOW TO DO THIS DRILL

Step 1: Float on your side in the water, arm towards the surface at your side, the arm closest to the bottom of the pool extended over your head. Engage core tension to achieve the “downhill” float.

Step 2: Begin a gentle but continuous flutter kick, which should also be directed side to side, rather than up and down.

Step 3: If you are properly aligned, your face will be mostly submerged. To breathe, maintain a stable head position and roll towards your back, breathe, then roll back to your original side position. Create a regular breathing interval.

Step 4: Kick twelve times (each leg equals one kick).



The 100 Best Swimming Drills

Step 5: Just as you finish the last kick, bring the side laying arm over the water to the front, and the forward reaching arm through the water to your side. At the same time, switch to the opposite side of your body to float.

Step 6: Do twelve more kicks in this position. Repeat the switch with your arms and floating side. Continue to kick twelve times then switch to the far end of the pool.

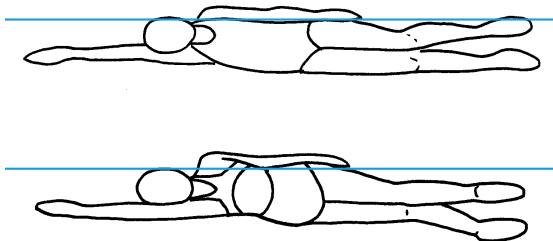


Figure 3 12 Kick Switch



DRILL FEEDBACK CHART

Problem	Modification
I go crooked.	Try to align your body and reaching arm.
My kick is not side to side.	This is usually a result of your hips not being aligned to the side with your shoulders. Use more core tension.
I can't maintain a "downhill" float.	Check your head position. During the twelve kicks, your lower ear should be resting on the shoulder of your reaching arm.

KICK DRILLS

A productive flutter kick is part of a good freestyle. It provides constant momentum, and counterbalance to the arm stroke. Because the legs require a disproportionate amount of energy, developing a relaxed, sustainable kick is important. The goal of the following freestyle kicking drills is to learn to use an economical flutter kick that will enhance the rest of the freestyle stroke.

Toe Point Drill

4

THE PURPOSE OF THIS DRILL

- Understanding the importance of a pointed toe kick
- Experimenting with foot pitch
- Develop a centralized kick

HOW TO DO THIS DRILL

Step 1: Lay horizontally in the water, face down, arms extended. To breathe, do a simple press outward on the water with your hands, and

The 100 Best Swimming Drills

raise your chin gently to the surface, then to return your face to the water, and bring your hands back together in an extended position.

Step 2: Begin doing the flutter kick, using alternating up and down motion with your leg. Kick to a depth of about twelve to fifteen inches, and up to the surface of the water. Kick briskly with relaxed, but fairly straight legs.

Step 3: Focus on your foot position. To best engage the water, you must use the largest surface of your feet to push against the water. Position your feet so your toes are pointed. Kick briskly for 30 seconds. Feel the tops and the bottoms of your feet push the water as your feet sweep up and down.

Step 4: Now, flex your feet at the ankles, setting them at right angles to your leg (the standing foot position). Kick briskly for 30 seconds. Feel the smaller surface with which you are pushing the water. Notice that you don't move forward well. Some people can even move backwards with this foot position!

Step 5: Now, reposition your feet so your toes are pointed, and rotate your knees and feet inward, so that your toes are closer together than your heels. Together, your feet should form a point. Kick briskly for 30 seconds. Feel a larger foot surface pressing against the water. Notice that your kick is much more effective, with much less effort, and that there is one centralized splash at your feet.

Step 6: Continue kicking with your toes pointed and your feet rotated inward. Kick briskly, with relaxed feet. Feel your kick move you forward as you sweep the water down with the tops of your feet, and up with the bottoms of your feet. Kick to the far end of the pool.



Figure 4a Toes Pointed



Figure 4b Toes Not Pointed



DRILL FEEDBACK CHART

Problem	Modification
My kick makes a huge splash, no matter what foot position I use.	Splash from your kick should be a result of your foot moving water, rather than your foot bringing air down into the water. Bend your knees less. Keep your feet connected to the water.
When I turn my feet inward, my big toes bump into each other.	You are fortunate to have excellent foot pitch! As you practice the drill more, adjust your knee rotation a bit to avoid your toes bumping, but do so as little as possible.
I get cramps in the arches of my feet when I point my toes.	Try pointing your foot and letting your toes be relaxed. As humans, this position is not natural for us. It can be improved as you practice more.