# RUTINA DE EJERCICIOS: SEGÚN EL DEPORTE Y SUS NECESIDADES BIOMOTORAS

Prof. Edgar Lopategui Corsino

# CHAPTER 9

# **Sport-Specific Programs**

NOTA. Reproducido de: Functional Training: Exercises and Programming for Training & Performance. (p. 207), por J. C. Santana, 2016, Champaign, IL: Human Kinetics. Copyright 2016 por Juan Carlos Santana

# **DEPORTES** INTERMITENTES CARACTERIZADOS POR UNA DEMANDA ALTA DE POTENCIA

# **High-Power Intermittent Sports**

High-power arena sports, such as American football and field and ice hockey, require quick bursts of action, lateral changes in direction, and extraordinary physical contact. Running distances rarely cover more than 10 to 20 yards (9-18 m) in a straight line. Quick and short changes of direction are needed during play and are often associated with obstacle avoidance. Because high power acceleration is needed, the posterior chain must be developed to a high level.

# Warm-Up for All Workouts

Chopper: 2 to  $3 \times 10$ 

Single-leg CLA anterior reach: 2 to 3 × 10 to 20 per leg

# CONDITIONING

Perform each triplex in order and then start the sequence again. Complete as many sets as indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.1.



DB or KB squat.



BP staggered-stance press.



BP staggered-stance CLA low-to-high row.

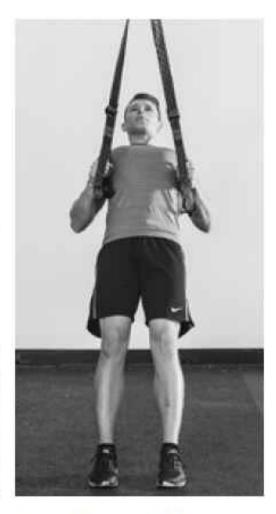
DB = Dumbbells, KB = Kettlebells, BP = Bands and Pulleys, CLA = Contralateral-Arm



BP deadlift.



Plank.



Recline pull (row).

### THE HOW

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.1** High-Power Intermittent Sports: Conditioning Triplexes

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Triplex 1  1. DB or KB squat  2. BP staggered-stance press  3. BP staggered-stance CLA low-to-high row	2 × 10	3 × 10	3 × 15	4 × 10 to 15	90 74 82
Triplex 2  1. BP deadlift  2. Plank (progress to three-point version)  3. Recline pull (row)	2 × 10	3 × 10	3 × 15	4 × 10 to 15	70 57 46

### Core 1

Triple Threat (weeks 1-5)

Slide running: 2 or  $3 \times 10$  to 20 per side

# STRENGTH

Perform each triplex in order for the number of sets indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while keeping good form. Unless otherwise specified, use the progression in table 9.2.





Single-leg squat. MB crossover push-up.



BP staggered-stance CLA compound row.

MB = Medicine Balls, BP = Bands and Pulleys, CLA = Contralateral-Arm



DB or KB single-leg RDL.



Single-arm eccentrics.



BP push-pull.

**DB** = **Dumbbells**, **KB** = **Kettlebells**, **BP** = **Bands** and **Pulleys** 

### THE HOW

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.2** High-Power Intermittent Sports: Strength Triplexes

All single-leg or single-arm exercises should be performed on each leg or arm.

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Triplex 1  1. Single-leg squat (add dumbbells or a medicine ball if necessary)	1 × 6	2 × 6	3 × 4 to 6	4 × 4 to 6	40
<ol> <li>MB crossover push-up</li> <li>BP staggered-stance CLA compound row</li> </ol>					115 83
Triplex 2  1. DB or KB single-leg RDL  2. Single-arm eccentrics  3. BP push–pull	1 × 6	2 × 6	3 × 4 to 6	4 × 4 to 6	92 59 89

### Core 2

Triple Threat (weeks 6-10)

Slide running: 2 or  $3 \times 10$  to 20 per side

# POWER AND POWER ENDURANCE

Perform each biplex in order for the number of sets indicated. For power, rest 1 minute between the first and second exercises, and then rest 1 to 2 minutes between the second and first exercises. For power endurance, do not rest between the first and second exercises, and then rest 1 minute between the second and first exercises. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.3.

# Additional Warm-Up for Power and Power-Endurance Workouts

Agility ladder split step: 2 or 3 sets

Agility ladder lateral rotational jump: 2 or 3 sets







BP staggered-stance press.



Explosive push-up.

**KB** = **Kettlebells**, **BP** = **Bands** and **Pulleys** 



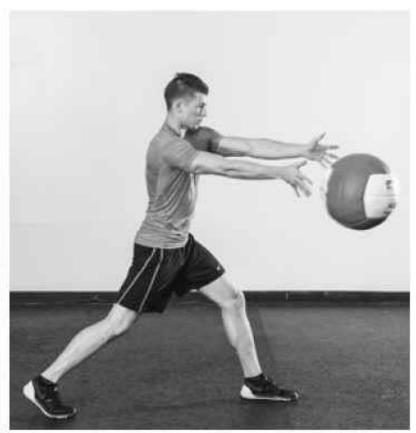
BP row.



MB overhead slam.



BP short rotation (10 to 2 o'clock).



MB rotational throw: perpendicular.

**BP** = Bands and Pulleys, MB = Medicine Balls

### THE HOW

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.3** High-Power Intermittent Sports: Power and Power-Endurance Biplexes
The single-arm swing should be performed on each arm.

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Biplex 1 1. KB single-arm swing 2. Squat jump	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	4 × 5 + 5	91 66
Biplex 2 1. BP staggered-stance press 2. Explosive push-up	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	4 × 5 + 5	74 69
Biplex 3 1. BP row 2. MB overhead slam	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	4 × 5 + 5	77 120
Biplex 4  1. BP short rotation (10 to 2 o'clock)  2. MB rotational throw: perpendicular	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	4 × 5 + 5	87 121

<sup>5 + 5</sup> indicates 60 seconds of rest between the first and second exercise for power. For power endurance, go straight from the first exercise to the second without resting.

# HOW TO - CONTINUACIÓN

## Core 3

For power: Triple Threat (weeks 11-15), slide running (2 or  $3 \times 10$ -20 per side) For power endurance: Triple Threat (weeks 16-20), slide running (3 or  $4 \times 10$ -20 per side)

### Metabolic

For power: 300-yard (274 m) shuttle (25 yd [22.8 m]  $\times$  12), 2 sets, 3 times per week (1:3 work:rest ratio)

For power endurance: 300-yard (274 m) shuttle, 3 or 4 sets, 2 or 3 times per week (1:2 to 1:1 work:rest ratio)

# DEPORTES DE DE RAQUETAS

# Racket Sports

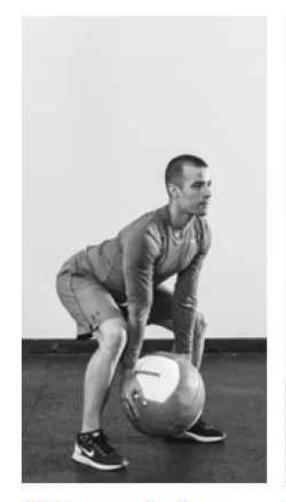
Racket sports such as tennis, badminton, racquetball, and squash have much in common. Players use low positions to get to low balls and overhead positions for serves or smashes. Quick and short changes of directions, especially lateral changes of direction, are needed during 5 to 8 seconds of play. The posterior musculature is especially important due to the low positions and changes of directions.

# Warm-Up for All Workouts

Gary's Dumbbell Matrix: 2 sets

# CONDITIONING

Perform each triplex in order and then start the sequence again. Complete as many sets as indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.4.



MB wood chop.



Side T plank.

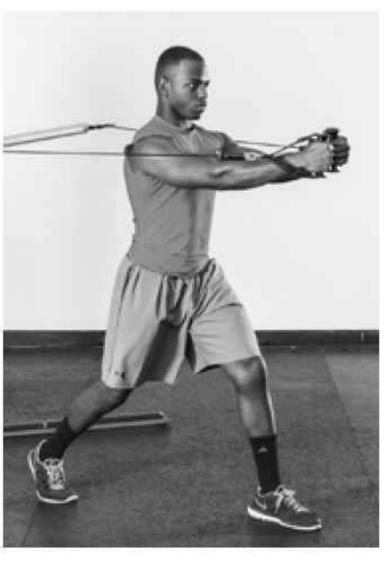


BP compound row.

MB = Medicine Ballas, BP = Bands and Pulleys



MB ABC squat.



BP staggered-stance fly.



BP staggered-stance CLA row.

MB = Medicine Balls, ABC = , BP = Bands and Pulleys, CLA = Contralateral-Arm

# THE HOW

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.4** Racket Sports: Conditioning Triplexes

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Triplex 1 1. MB wood chop 2. Side T plank 3. BP compound row	2 × 10	3 × 10	3 × 15	4 × 10 to 15	110 58 80
Triplex 2 1. MB ABC squat 2. BP staggered-stance fly 3. BP staggered-stance CLA row	2 × 10	3 × 10	3 × 15	4 × 10 to 15	112 76 81

### Core 1

Core Activator: 2 × 10

Rope circles (clockwise and counterclockwise): 2 × 10 to 15 sec. each direction

Vibration blade throw: 2 × 10 sec. per side

# STRENGTH

Perform each triplex in order for the number of sets indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.5.



BP low-to-high chop.



DB single-arm diagonal fly rotation.



BP staggered-stance CLA compound row.

**BP = Bands and Pulleys, DB = Dumbbells, CLA = Contralateral-Arm** 











DB or KB staggered-stance bent-over single-arm row.

### THE HOW

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

### **TABLE 9.5** Racket Sports: Strength Triplexes

The DB single-arm diagonal fly rotation and DB or KB staggered-stance bent-over single-arm row should be performed on each arm.

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Triplex 1  1. BP low-to-high chop  2. DB single-arm diagonal fly rotation  3. BP staggered-stance CLA compound row	1 × 6	2 × 6	3 × 4	4 × 4	86 106 83
Triplex 2  1. DB or KB lateral reaching lunge 2. T push-up (slow) 3. DB or KB staggered-stance bent-over single-arm row	1 × 6	2 × 6	3 × 4	4 × 4	95 60 97

### Core 2

X-up:  $2 \times 10$ 

SB rollout: 2 × 10

Rope circles (clockwise and counterclockwise): 2 × 20 sec. each direction

Vibration blade throw: 2 × 15 sec. per side

# POWER AND POWER ENDURANCE

Perform each biplex in order for the number of sets indicated. For power, rest 1 minute between the first and second exercises and then 1 to 2 minutes between the second and first exercises. For power endurance, do not rest between the first and second exercises, but rest 1 minute between the second and first exercises. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.6.

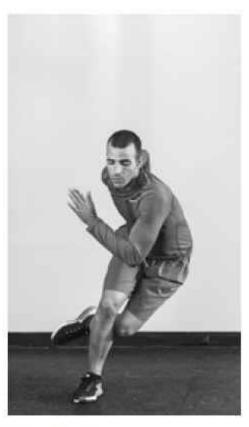
# Additional Warm-Up

Crooked stick hexagon drill: 2 or 3 sets

Crooked stick cross-rotational jump drill: 2 or 3 sets



DB or KB lateral reaching lunge.



Skater.



BP low-to-high chop.



MB rotational throw: perpendicular.

**DB** = **Dumbbells**, **KB** = **Kettlebells**, **MB** = **Medicine Balls** 



BP high-to-low chop.



MB overhead side-to-side slam.



BP swim.



MB overhead slam.

**BP** = Bands and Pulleys, MB = Medicine Balls

### THE HOW

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.6** Racket Sports: Power and Power-Endurance Biplexes

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Biplex 1  1. DB or KB lateral reaching lunge 2. Skater	2 × 5 + 5	3 × 5 + 5	3 or 4 × 5 + 5	4 × 5 + 5	95 67
Biplex 2  1. BP low-to-high chop  2. MB rotational throw: perpendicular	2 × 5 + 5	3 × 5 + 5	3 or 4 × 5 + 5	4 × 5 + 5	86 121
Biplex 3  1. BP high-to-low chop  2. MB overhead side-to-side slam	2 × 5 + 5	3 × 5 + 5	3 or 4 × 5 + 5	4 × 5 + 5	85 121
Biplex 4 1. BP swim 2. MB overhead slam	2 × 5 + 5	3 × 5 + 5	3 or 4 × 5 + 5	4 × 5 + 5	84 120

Biplex = 1 Traditional exercise + 1 functional exercise

<sup>5 + 5</sup> indicates 60 seconds of rest between the first and second exercise for power. For power endurance, go straight from the first exercise to the second without resting.

# HOW TO - CONTINUACIÓN

### Core 3

Single-leg CLA anterior reach: 3 × 10 per leg

Rope circles (clockwise and counterclockwise):  $3 \times 10$  to 15 sec. each direction

Vibration blade throw:  $3 \times 10$  sec. per side

### Metabolic

For power: spider drill, 2 or 3 sets, 3 times per week (1:3 work:rest ratio)

For power endurance: spider drill, 4 or 5 sets, 2 or 3 times per week (1:2 to 1:1 work:rest ratio)

Aim to complete the spider drill in 17 to 21 seconds.

# **DEPORTES** DE BATEAR, LANZAR ATRAPAR

# Batting, Throwing, and Catching Sports

Sports such as baseball, softball, and cricket consist primarily of batting, throwing, and catching. Batting requires strong rotational movements and force transfer from the ground to the arms. The throwing motion uses the anterior aspect of the core to generate power. Catching requires various abilities, depending on the sport and position the athlete plays. A power-endurance phase is included for high-repetition positions such as pitchers and catchers.

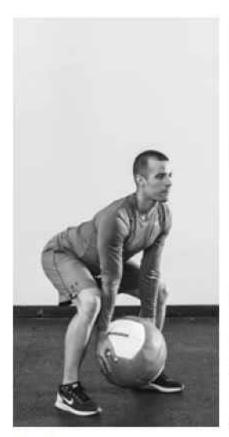
# Warm-Up for Conditioning and Strength

Gary's Dumbbell Matrix: 1 or 2 sets

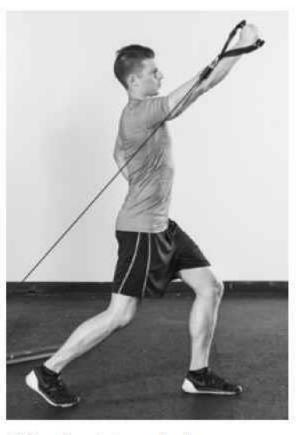
Vibration blade throw:  $3 \times 10$  per side

# CONDITIONING

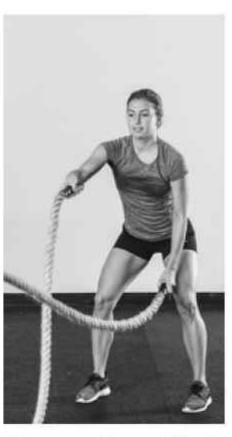
Perform each triplex in order and then start the sequence again. Complete as many sets as indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.7.



MB wood chop.



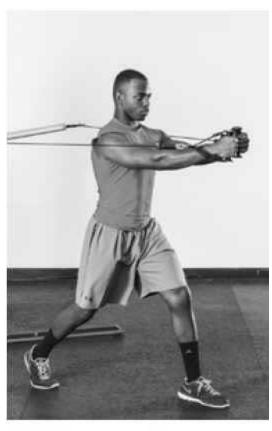
BP staggered-stance CLA incline press.



Ropes alternating up and down.



MB lunge with rotation.

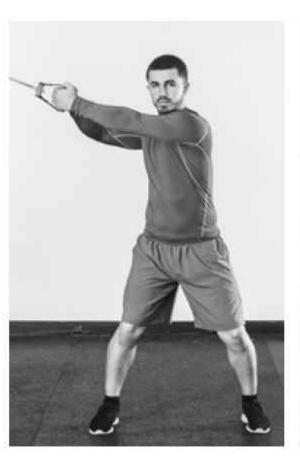


BP staggered-stance fly.

MB = Medicine Balls, BP = Bands and Pulleys



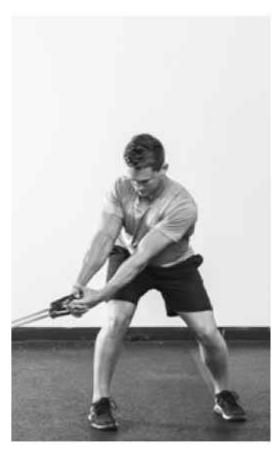
SB rollout.



BP high-to-low chop.



BP short rotation (10 to 2 o'clock).



BP low-to-high chop.

SB = Stability Balls, BP = Bands and Pulleys, CLA = Contralateral-Arm

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.7** Batting, Throwing, and Catching Sports: Conditioning Triplexes

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Triplex 1  1. MB wood chop  2. BP staggered-stance CLA incline press  3. Ropes alternating up and down	2 × 10	3 × 10	3 × 15	4 × 10 to 15	110 73 139
Triplex 2  1. MB lunge with rotation  2. BP staggered-stance fly  3. SB rollout	2 × 10	3 × 10	3 × 15	4 × 10 to 15	113 76 127
Triplex 3 (Steel Core)  1. BP high-to-low chop  2. BP short rotation (10 to 2 o'clock)  3. BP low-to-high chop	2 × 10	3 × 10	3 × 15	4 × 10 to 15	85 87 86

Triplex = 1 Traditional exercise + 2 functional exercise

#### Core 1

Fabulous Five: 2 sets

Vibration blade throw: 2 × 10 sec. per side

Rope circles (clockwise and counterclockwise): 2 × 10 sec. each direction

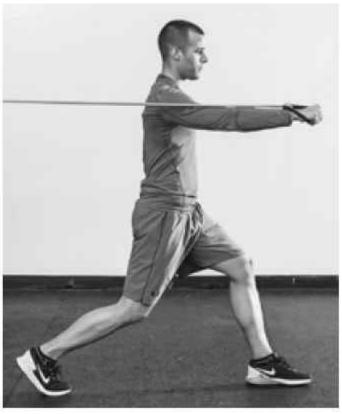
# STRENGTH

Perform each triplex in order for the number of sets indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.8.

# THE EXERCISES



BP low-to-high chop.



BP staggered-stance CLA press.



BP staggered-stance alternating row.



DB or KB front reaching lunge.



T push-up.

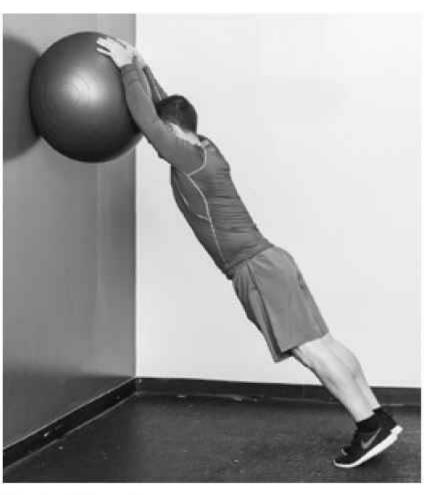


BP push-pull.

**DB** = **Dumbbells**, **KB** = **Kettlebells**, **BP** = **Bands** and **Pulleys** 



BP staggered-stance CLA compound row.



SB rollout.



X-up.

**BP = Bands and Pulleys, CLA = Contralateral-Arm, SB = Stability Balls** 

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.8** Batting, Throwing, and Catching Sports: Strength Triplexes

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Triplex 1  1. BP low-to-high chop  2. BP staggered-stance CLA press  3. BP staggered-stance alternating row	1 × 6	2 × 6	3 × 4	4 × 4	86 72 78
Triplex 2  1. DB or KB front reaching lunge 2. T push-up (slow) 3. BP push-pull	1 × 6	2 × 6	3 × 4	4 × 4	94 60 89
Triplex 3  1. BP staggered-stance CLA compound row 2. SB rollout 3. X-up*	1 × 6	2 × 6	3 × 4	4 × 4	83 127 62

<sup>\*</sup>Make the exercise harder by slowing down to a 3 count up and 3 count down.

#### Core 2

Ropes alternating up and down: 2 × 20 per arm

Rope circles (clockwise and counterclockwise): 2 × 10 to 20 sec. each direction

Vibration blade throw: 2 × 10 sec. each side

# POWER AND POWER ENDURANCE

Perform each biplex in order for the number of sets indicated. For power, rest 1 minute between the first and second exercises, and then rest 1 to 2 minutes between the second and first exercises. For power endurance, do not rest between the first and second exercises, and then rest 1 minute between the second and first exercises. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression shown in table 9.9.

## Warm-Up

Steel Core:  $3 \times 10$ 

Ropes alternating up and down: 2 × 20 per arm

Rope circles (clockwise and counterclockwise):  $2 \times 10$  to 20 sec. each direction

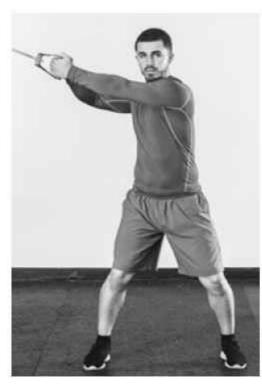
# LOS EJERCICIOS



BP staggered-stance CLA deadlift. Alternating split



Alternating split jump.



BP high-to-low chop.



MB rotational throw: perpendicular.

**BP = Bands and Pulleys, CLA = Contralateral-Arm, MB = Medicine Balls** 

# LOS EJERCICIOS - CONTINUACIÓN



BP push-pull.



MB staggered-stance CLA straight chest throw.



BP staggered-stance CLA high-to-low row.



MB overhead slam.

**BP = Bands and Pulleys, MB = Medicine Balls, CLA = Contralateral-Arm** 

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

**TABLE 9.9** Batting, Throwing, and Catching Sports: Power and Power-Endurance Biplexes

#### **POWER**

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Biplex 1  1. BP staggered-stance CLA deadlift  2. Alternating split jump	2 × 5 + 5	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	71 66
Biplex 2  1. BP high-to-low chop  2. MB rotational throw: perpendicular	2 × 5 + 5	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	85 121
Biplex 3 1. BP push–pull 2. MB staggered-stance CLA straight chest throw	2 × 5 + 5	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	89 118
Biplex 4  1. BP staggered-stance CLA high-to-low row  2. MB overhead slam	2 × 5 + 5	2 × 5 + 5	3 × 5 + 5	3 × 5 + 5	82 120

# **TABLA 9.9** Deportes de Batear, Lanzar y Atrapar: Biplexiones de Potencia y Potencia-Tolerancia - *continuación*

#### POWER ENDURANCE

Biplex 1  1. BP staggered-stance CLA deadlift  2. Alternating split jump	2 or 3 × 5 + 5	2 or 3 × 5 + 5	3 or 4 × 5 + 5	3 or 4 × 5 + 5	71 66
Biplex 2  1. BP high-to-low chop  2. MB rotational throw: perpendicular	2 or 3 × 5 + 5	2 or 3 × 5 + 5	3 or 4 × 5 + 5	3 or 4 × 5 + 5	85 121
Biplex 3  1. BP push-pull  2. MB staggered-stance CLA straight chest throw	2 or 3 × 5 + 5	2 or 3 × 5 + 5	3 or 4 × 5 + 5	3 or 4 × 5 + 5	89 118
Biplex 4  1. BP staggered-stance CLA high-to-low row  2. MB overhead slam	2 or 3 × 5 + 5	2 or 3 × 5 + 5	3 or 4 × 5 + 5	3 or 4 × 5 + 5	82 120

5 + 5 indicates 60 seconds of rest between the first and second exercise for power. For power endurance, go straight from the first exercise to the second without resting.

# HOW TO - CONTINUACIÓN

# Core 3

SB rollout:  $3 \times 10$ 

Single-leg CLA anterior reach:  $3 \times 10$  per leg

Vibration blade throw:  $2 \times 10$  sec. each side

# DEPORTES DE DE CORRER

# Running Sports

Sports that require high power or sustained running, such as track and field and endurance running, are rarely grouped together. However, all running is a variation of a sprint. This approach is substantiated by the increased amount of forefoot running in long races (e.g., mile, 5K, marathons). Long distances that used to be covered using a heel-to-toe (full foot) plant are now being raced on the forefoot and finished in sprint times. Therefore, this program increases the power output of the body's locomotive system and then lets the athlete adapt the power gained to his specific race and distance covered.

## Warm-Up for Conditioning and Strength

Fabulous Five: 2 sets

Runner's reach:  $2 \times 10$  to 20

# CONDITIONING

Perform each quadplex in order and then start the sequence again. Complete for as many sets as indicated. Rest adequately between each exercise to maintain good form and quality of movement, eventually targeting a 30- to 60-second rest period after each exercise. Use enough load to make the assigned repetitions challenging while maintaining good form. Unless otherwise specified, use the progression in table 9.10.

# LOS EJERCICIOS



Single-leg CLA anterior reach.



DB or KB cross overhead press.



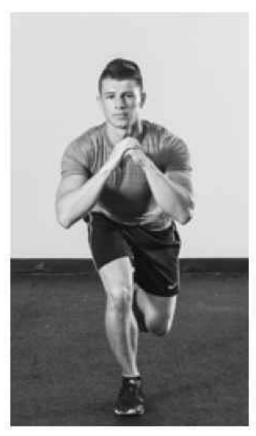
SB hands-on-ball push-up.



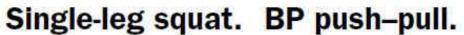
45-degree calf pump.

**CLA = Contralateral, DB = Dumbbells, KB = Kettlebells, Arm, SB = Stability Balls** 

# LOS EJERCICIOS - CONTINUACIÓN

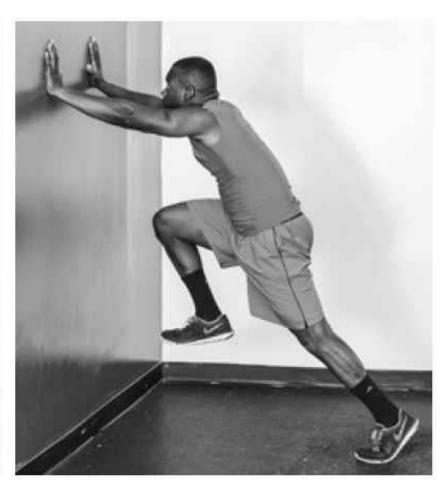


RP nush\_null





Recline pull (row).



45-degree wall run.

**BP = Bands and Pulleys** 

If your fitness level is high, you can start with any week that feels comfortable and repeat the week as many times as necessary to create a strong base of training.

#### **TABLE 9.10** Running Sports: Conditioning Quadplexes

The single-leg CLA anterior reach and single-leg squat should be performed on each leg.

Exercise	Week 1	Week 2	Week 3	Week 4	Page
Quadplex 1 1. Single-leg CLA anterior reach 2. DB or KB cross overhead press 3. SB hands-on-ball push-up 4. 45-degree calf pump (15 sec.)	2 × 10	3 × 10	3 × 15	4 × 10 to 15	39 100 125 63
Quadplex 2 1. Single-leg squat 2. BP push–pull 3. Recline pull (row) 4. 45-degree wall run (15 sec.)	2 × 10	3 × 10	3 × 15	4 × 10 to 15	40 89 46 64

#### Core 1

Triple Threat (weeks 1-5)

Running curl: 2 or  $3 \times 10$  to 20 per arm

CLA = Contralateral-Arm, DB = Dumbbells, KB = Kettlebells, SB = Stability Balls, BP = Bands and Pulleys