The Benefits of Combination Lifts

Istvan Steve Javorek  
All Sports Conditioning Head Coach  
Johnson County Community College, Overland Park, Kansas

IN RECENT YEARS, THE TERM “combination lifts” has been used more frequently in sports conditioning circles. Armstrong (1) discussed the use of combination lifts for in-season training. The purpose of this article is to share ideas on combination lifts, incorporating them with earlier publications (2, 3).

By definition, combination lifts consist of two or more free weight exercises that are combined in a nonstop, continuous movement. Although some conditioning specialists believe these lifts consist of just a few exercise combinations, frequently a power clean and another exercise, in reality the list is much larger.

The main purposes of combination lifts are to:

- Improve and stimulate neuromuscular coordination;
- Increase the workout load and intensity;
- Stimulate the skeletal muscular system;
- Increase the cardiovascular benefits of the free-weight program;
- Make the program more dynamic and efficient.

The number of combination exercises is unlimited, depending on a coach’s knowledge and creativity, the availability of equipment, and the goals of the coach and athletes.

Program Overview

I make a distinction between the major multijoint lift exercises (snatch, clean, jerk, pulls, squats) and auxiliary exercise combinations, categorizing them as follows:

A. Simple—two major lifts in combination;
B. Complex—more than two major lifts in combination;
C. Assistance exercise combinations.


© 1998 National Strength & Conditioning Association
Variations of the Three Categories

A. Simple

I classify the simple exercise combinations (two major lift exercises) into four major groups: clean, snatch, pull, and squat.

Variation 1. Consecutive repetitions of two major lift exercises.

Example: Snatch grip pull/4 + split snatch/6.

Variation 2. Alternating repetition of two major lift exercises.

Examples: Snatch grip pull/3 + split snatch/3 + snatch grip pull/3 + split snatch/3, or repeat these 4 exercises but 3 = 1 each time.

Depending on the goals and a coach's imagination, these combination variations are virtually unlimited.

Clean related (power, squat, or split clean from the platform, hang, or boxes)

Simple combinations:
- Clean + overhead press
- Clean + push press
- Clean + push jerk
- Clean + split jerk
- Clean + front squat

Snatch related (power, squat, or split snatch from the platform, hang, or boxes)

Simple combinations:
- Snatch + overhead squat
- Snatch + behind-neck overhead press
- Snatch + behind-neck overhead push press
- Snatch + behind-neck overhead squats + push press

Pull related (clean or snatch grip; from the platform, hang, or boxes; single knee bent pull, straight leg deadlift pull, or "double knee bent" pull + snatch or clean)

Simple combinations:
- Single knee bent snatch grip pull + snatch
- Single knee bent clean grip pull + clean
- Single knee bent snatch grip pull + shrug
- Single knee bent clean grip pull + shrug

Same exercise combinations with straight leg pulls or regular pulls.

Squat related (back squat, front squat, squat jump, wave squat, quarter squat + other exercises)

Simple combinations:
- Front squat + overhead press
- Back squat + behind-neck overhead press
- Front squat + push press
- Front squat + jerk variations
- Back squat + behind-neck overhead push press.
- Front squat + squat push press
- Back squat + squat push press
- Back squat + good morning
- Back squat + squatt jump
- Back squat + wave squat
- Squat jump + wave squat
- Front squat + clean variations
- Front squat + snatch variations
- Lunge variations + clean variations
- Heel raise + wave squat
- Heel raise + quarter squat
- Heel raise + back squat

B. Complex

There are three variations of the complex (multiple major lift) exercise combinations.


Example: Clean grip pull + squat clean + push press.

Variation 2. Pull (clean grip) + clean (squat, power, split) + jerk variations.

Example: Clean grip single knee bent pull + split clean + push jerk.

Variation 3. Pull (wide or snatch grip) + snatch (squat, power, split) + press variations.

Example: From hang below the knees, snatch grip pull + power snatch + snatch grip overhead squat + behind-neck snatch grip overhead press variations.

C. Assistance Exercise Combinations

Assistance exercise combinations should be sequenced in a way that avoids interruption, providing a smooth, continuous motion. It is important to finish this smooth progression of the drill with the combination's most dynamic movement, thus stimulating the athlete's explosive qualities. It is very simple to combine several assistance exercises to give this smooth progression.

Depending on the athlete's own goals, the number of variations is virtually unlimited. Five barbell complex exercises that I use in all sports conditioning are included in the complex combination lift assistance exercises:

(a) with barbells, and
(b) with dumbbells.

They can be considered the major assistance exercise combination groups:

✔ Barbell Complex Exercises

Exercises 1 and 2. Upright row + high pull snatch + squat push press + good morning + bent-over row.

Complex 1 is just 1 cycle performed with 6 reps of each exercise.

Complex 2 is performed with 3 reps of each exercise, repeating the 5-exercise cycle 2 or 3 times from the beginning, nonstop.
Exercises 3 and 4. Curls/6 + high pull snatch from hip/6 + bent-over row/8 + behind-neck press/6 + good morning/10 + behind-neck push press/6 + curls/6 + upright row/6.

Complex 3 involves 1 cycle of each exercise.

Complex 4 involves 3 reps of each exercise, repeating the 8-exercise cycle 2 or 3 times from the beginning, nonstop.

Exercise 5. Upright row/6 + high pull snatch/4 + bent-over row/8 + push press/6 + upright row/6 + behind-neck alternating leg step-ups on box/14 + 14 high pull snatch/4 + good morning/16 + squat jump/8.

Complex 5 is just 1 cycle performed with the given repetitions each exercise. Some other exercise samples:

Variation 1. Upright row + high pull snatch + overhead squat + behind-neck push press + squat jump.

Variation 2. Upright row + bent-over row + snatch grip pull + good morning + behind-neck push press + wave squat + squat jump.

✓ Dumbbell Complex Exercises
Combination Lifts (with 1 hand; with 2 hands). I have developed 5 DB combination exercise complexes.

Exercises 1 and 2. Upright row + high pull snatch + squat push press + bent-over row + high pull snatch.

Complex 1 is just 1 cycle performed with 6 reps of each exercise.

Complex 2 involves 3 reps of each exercise, repeating the 5-exercise cycle 2 or 3 times from the beginning, nonstop.

Exercises 3 and 4. Curl/6 + upright row/6 + bent-over row/6 + high pull snatch/6 + overhead press/6 + rotational curl/6 + upright row/6 + squat push press/6.

Complex 3 is just 1 cycle performed with 6 reps of each exercise.

Complex 4 involves 3 reps of each exercise, repeating the 8-exercise cycle 2 or 3 times from the beginning, nonstop.


Complex 5 is just 1 cycle performed with the given repetitions each exercise.

Training Programs
I use combination lift exercises year-round. The number of sets and reps differ, depending on goals and preparation periods that demand different intensities.

In the first part of a workout I use combination exercises as a general warm-up drill. Different variations can be used in the complete workout when there are specific goals for training. These might include stimulating muscular hypertrophy, strength, specific endurance, muscular tone, muscular coordination, or rehabilitation.

A coach should first teach the proper technique for each exercise, then establish the 1-RM for each. After this comes the mandatory steps, gradually combining more and more exercises. This is when the coach should determine the number of repetitions, sets, and intensities that will yield maximum benefit to athletes as they prepare for their specific sport.

Following are examples of two variations of intensity in preparing for two sports—cross-country and throwing. Both of them incorporate the Dumbbell Complex 1 and 2 exercises every week:

1. Cross-Country
Monday. DB Complex 2. For cross-country, we start with the Complex 2's normal 3 cycles. I consider a cycle 3 reps of each of the 5 exercises in a continuous, nonstop manner. We gradually increase the number of cycles from 3 to 5. A sample schedule using the 5 exercises in Complex 2 is shown in Table 1.

As the athlete progresses, the number of repetitions can be increased. For example, you can increase to 4 reps of each exercise in 4 cycles, 5 reps in 4 cycles, then 5 reps in 5 cycles. The intensities (intensity taken from 1-RM of DB upright row) are between 30 and 40%, that is, 2 sets at 30%; 2 at 35%, and 2 at 40%. Our runners do 6 sets of Complex 2 each Monday.

Wednesday. DB Complex 1. For cross-country, we do 6 reps of each of the 5 exercises per cycle, then gradually increase to 7 and later to 8 reps per exercise. The intensities (taken from 1-RM of DB upright row) are between 30 and 60%. The runners do 6 sets of Complex 1 each Wednesday.

Friday. DB Complex 2. On Friday we do 6 sets of Complex 2, incorporating the same principles of increased repetitions as on Monday. Higher intensities are recommended on Friday. For cross-country these would range from 40 to 60%.

2. Throwers
Monday. DB Complex 1. This includes 6 sets at 50 to 70% intensity, i.e., 1 set each at 50, 55, and 60%; then 2 sets at 65%, then 1 set at 70%.

Wednesday. DB Complex 2. This includes 6 sets with 3 reps of each exercise per cycle at 50 to 65% intensity, i.e., 2 sets at 50%, then 2 at 55%, then 1 set each at 60 and 65%.

Friday. DB Complex 1. This includes 6 sets at 60 to 75% intensity, i.e., 2 sets at 60%, then 2 at 65%, then 1 set each at 70 and 75%.
Table 1
Sample of 4-Week Scheduling

<table>
<thead>
<tr>
<th></th>
<th>Week 1</th>
<th>Week 2</th>
<th>Weeks 3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB upright row</td>
<td>× 3 cycles</td>
<td>× 4 cycles</td>
<td>× 5 cycles</td>
</tr>
<tr>
<td>DB high pull snatch</td>
<td>× 3 cycles</td>
<td>× 4 cycles</td>
<td>× 5 cycles</td>
</tr>
<tr>
<td>DB squat push press</td>
<td>× 3 cycles</td>
<td>× 4 cycles</td>
<td>× 5 cycles</td>
</tr>
<tr>
<td>DB bent-over row</td>
<td>× 3 cycles</td>
<td>× 4 cycles</td>
<td>× 5 cycles</td>
</tr>
<tr>
<td>DB high pull snatch</td>
<td>× 3 cycles</td>
<td>× 4 cycles</td>
<td>× 5 cycles</td>
</tr>
</tbody>
</table>

One of the biggest benefits of combination lifts is that novice athletes can use them. I believe every young athlete should start exercising with assistance exercises and their combinations. The wonderful thing about free weights is the possibility of choosing the intensity, repetition, and sets based on one's preparation level and goals.

Like any other exercise form, teaching the combination lifts requires professionalism and patience. The goal is to get the athlete gradually involved in a whole combination lifting program. ▲

References

Istvan Steve Javorek is all sports conditioning head coach at Johnson County Community College. Originally from Romania, he was awarded the title of Coach Emeritus of Romania and has coached several Olympic medalists.

Certified Strength and Conditioning Specialists can now wear their credentials with pride! This heavy-weight 100% white cotton shirt has the CSCS logo screened in black on the left chest, the NSCA logo on the sleeve and “CERTIFIED” in red across the back. Available in M, L, XL, XXL, and XXXL.

Item #GC100  Price: $16 each + $5 shipping and handling for 1st shirt and $1 for each additional shirt. International residents call or fax for shipping charges. Colorado residents call for sales tax charges.

ORDER BY PHONE OR FAX WITH VISA OR MASTERCARD.
Your certification number is required to order.

Tel (719) 632-NSCA • Fax (719) 632-6367