Diversifying your Repertoire

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Are you feeling bored and tired from your typical exercise programs? Do you find yourself constantly looking around for new workouts and new exercises? Have no fear, as I have come to the rescue with a plan for expanding your exercise menu that will undoubtedly be a cut-above all of the mindless training programs out there.

Typical Workouts

Unfortunately, most coaches out there simply prescribe what they did as athletes and, in the process, do their athletes a huge disservice. The field of strength and conditioning is a new and exciting field that is constantly growing; new ideas and plans emerge every day around the world. The following information is geared towards expanding every coach's exercise menu so that they can better provide variety in order to keep their athletes motivated.

Every good program involves the basics (i.e. Cleans, Squats, Benches, Deadlifts), but continuously performing these same variations over and over again can be monotonous and lead to stagnation and boredom. Without these subtle variations, workouts become mindless over time and may even cause repetitive stress injuries.

The human body is a remarkable piece of machinery in that it adapts very well to the stresses that are imposed upon it. If you continuously use the same modalities to stress the body, it will adapt by learning to perform the movement more efficiently, expending less energy in the process. Efficiency is a goal of training, but performing the same exercises constantly can lead to stagnation, lack of motivation to train, and potentially muscular imbalances.

These problems have emerged largely because our society has broken the human body into muscles groups instead of a single cohesive unit. Bodybuilders train muscle groups (chest, back, shoulders, quads, etc.), whereas athletes train movements. The body does not act in isolation during sport, so why should it be isolated during training? There is a time and place for isolation exercises (namely in rehabilitation situations), but the majority of training should emphasize *movement* training.

Think in Movements

The central nervous system (CNS) is the main control system for the entire body. It recruits specific motor units and muscles to produce a movement. This movement will ultimately dictate the muscles that will be recruited. If a particular movement does not look right, it may be a result of improper recruitment patterns, or other muscles may be overactive or inhibited due to a number of problems (tightness, weakness, etc.). These issues may require isolation work for the individual to "turn on" the proper musculature, but they will not produce the complete athlete.

All individuals perform movements, and should be considered athletes. We all walk, lunge, squat, run, push, pull - and should train accordingly. Thinking in movements not only makes sense but also creates a large exercise menu.

Body Breakdown

When establishing an exercise menu, it is important to first lay out how the movements will be broken up; doing so ensures that there will be a balance between all muscle groups and movements. The big problem with training muscles is that certain muscles (agonist) will get more work than their counterparts (antagonists). An example of this is when trainees work the "chest" and "back" together. Most people will train pressing movements, such as bench and incline, for their chest, and will perform pulling movements, such as lat pull-down and pull-ups for their back. The problem is that vertical pulling movements such as lat pull-downs and pull-ups internally rotate the humerus; this internal rotation also occurs in most pressing movements. Conventional thinking is that you are balancing training when you really are not. From the information below, you will see how movements should be paired to create balance and minimize kinetic chain dysfunction. The movements are divided into:

1. Total Body Movements
2. Lower Body Movements
3. Upper Body Movements
4. Middle Body Movements - see A Practical Approach to Torso Training articles

Total Body Movements are further broken down into:
a. Explosive Movements
b. Combination Movements

Lower Body Movements are further broken down into:
a. Squat Movements (knee/quad dominant)
b. Bend Movements (hip/glute/hamstring dominant)

Upper Body Movements are further broken down into:
a. Push Movements (moving a load away from body)
b. Pull Movements (moving a load closer to body)

Explosive Movements are further broken down into:
i. Olympic (Snatch)
ii. Jumps (Jump Squats)

Combination Movements are further broken down into:
i. Upper-Lower (Squat to Press)
ii. Upper-Upper (Upright Row to Press)

Squat Movements are further broken down into:
i. 2-Leg (Squat)
ii. 1-Leg (Lunge)

Bend Movements are further broken down into:
i. Straight Leg (Straight Leg Dead-lift)
ii. Bent Leg (Glute Ham)

Push Movements are further broken down into:
i. Horizontal (Bench Press)
ii. Vertical (Shoulder Press)

Pull Movements are further broken down into:
i. Horizontal (Bent Over Row)
ii. Vertical (Pull-up)

In summary:

I. Total Body
a. Explosive

i. Olympic

ii. Jumps

b. Combination

i. Upper-Lower

ii. Upper-Upper

II. Lower Body

a. Squat

i. 2-Leg

ii. 1-Leg

b. Bend

i. Straight Leg

ii. Bent Leg

III. Upper Body

a. Push

i. Horizontal

ii. Vertical

b. Pull

i. Horizontal

ii. Vertical

The next step is to create a basic menu of exercises that you commonly perform for each category. A simple one is listed below.

Total Body Exercises

Explosive- Olympic	Explosive- Jumps	Combo - Up/Low	Combo - Up/Up
Hang Snatch	Jump Squats	Squat to Press	Up Row to Press
Hang Clean	Power Step Ups	Lunge to Up Row	Bent Row to Curl
Jerk	Box Jumps	Step Up to Press	Curl to Press

Lower Body Exercises

Squat - 2 Leg	Squat - 1 Leg	Bend - St. Leg	Bend - Bent Leg
Back Squat	Lunge	SLDL	Dead-lift
Leg Press	Step Up	Hypers	Glute Ham
Front Squat	Split Squat	Hip Lift	Bucks (Hip Extension)

Upper Body Exercises

Push - Horz	Push - Vert	Pull - Horz	Pull - Vert
Bench Press	Shoulder Press	Bent Over Row	Upright Row
Pushup	Dips	Inverted Row	Pull-up
Incline Press	Pike Press	1 Arm DB Row	Chin-up

The exercises listed are very basic and common to most coaches and athletes, but now I will explain how you can spice up these basic exercises to invigorate and motivate your athletes.

Changing Exercises
The first thing to do is to distinguish between workout/program variables and exercise variables. Workout/Program variables are variables that can be manipulated to design or change a workout/program. These variables are:

a. Tempo
b. Rest
c. Load
d. Sets
e. Reps
f. Relative Intensity

Exercise variables are variables that can be manipulated to change a particular exercise. These variables are:

a. Stance/Posture
b. Implement
c. Grip
d. Surface
e. Plane
f. Limb Involvement

By changing any one of these six exercise variables, you can change a basic exercise into a more complex and different one. This new exercise may be the same basic movement, but the brain will receive a new stimulus because of the new change. This will result in the recruitment of different muscle fibers and overall enhancement of the exercise. Listed below are the different options for each variable. There may be more than listed below, so don't freak out if I miss a few. Please note that not all the options are applicable to all exercises, but the majority of them can be used to change an exercise. In other words, you're only limited by your imagination.

Stance/Posture	Implement	Grip	Surface	Plane	Limb Involvement
Standing	Barbell (BB)	Overhand (OH)	Stable	Sagittal	Bilateral
Seated	Dumbbell (DB)	Underhand (UH)	Unstable	Frontal	Unilateral
Prone (face down)	Med Ball (MB)	Alternate (Alt.)		Transverse	Alternate (Alt.)

Supine (face up)	Manual Resistance (MR)	Towels		Scapular	
Split Stance	Bodyweight (BW)	V-Grip			
1-Leg	Bands	Parallel			
Parallel	Chains	Wide			
Wide	Cambered Bar	Narrow			
Narrow	Plates	Low Bar			
	Cables	High Bar			
	Machines				
	Kettlebell (KB)				
	Weight Belt				
	Weight Vest				
	Trap Bar				
	Safety Squat Bar				
	EZ Bar				
	Thick Bar				

Examples
In the table below, you'll see how a particular movement and a basic exercise can be changed into six different exercises.

Explosive Olympic
Snatch

Stance/Posture	Implement	Grip	Surface	Plane	Limb Involvement
Split Snatch	DB Snatch	Medium Grip Snatch	NA	1-Arm DB Rotational Snatch	Alt. DB Snatch

Horizontal Push
Pushup

Stance/Posture	Implement	Grip	Surface	Plane	Limb Involvement
1-Leg Pushup	DB Pushups	Close Grip Pushups	Hands on Ball Pushups	Rotational Pushups	1-Arm Pushups

Vertical Pull

Pull-up

Stance/Posture	Implement	Grip	Surface	Plane	Limb Involvement
NA	Weighted Pull-ups	Parallel Grip Pull-ups	NA	Side-to-Side Pull-ups	1-Arm Pull-ups

2 Leg Squat
Back Squat

Stance/Posture	Implement	Grip	Surface	Plane	Limb Involvement
Narrow Stance Back Squat	Safety Bar Back Squat	High Bar Back Squat	Balance Board Back Squat	Lateral Back Squat	Alternate Lateral Back Squat

Straight Leg Bend
SLDL (Straight Leg Dead-lift)

Stance/Posture	Implement	Grip	Surface	Plane	Limb Involvement
1-Leg DB SLDL	Band SLDL	Underhand BB SLDL	1-Leg DB SLDL on Airex	1-Leg Rotational DB SLDL	1-Arm BB SLDL

Change it Up
These are just a few basic examples of how you can change five simple exercises into 27 different ones. As I mentioned before, not all variables may be applicable, but for the most case many are. Think outside the box when designing new and fun workouts for yourself or your athletes. Don't stray too far away from the basic movements, but use these variations as supplemental or auxiliary exercises to spice up those old ones. These variables primarily work if you understand the movements and begin to think of exercises as movements; this mindset will make things a lot easier to understand and manipulate. Good luck to you and your athletes with this new, diverse repertoire!

References
1. 2000. King, I. *So You Want To Become a Strength and Conditioning Coach*. P. 33-34

2. 2001. Boyle, M. *Designing Off Season Strength Training Programs-A Practical Approach*. NSCA Sport Specific Conference.