



# Build Your Own Workout: Beginners Edition

RAMON SODANO, CSCS

# Agenda

- ▶ Basic Terminology
- ▶ Types of Resistance Training Exercises
- ▶ General Training Principals
- ▶ Load Protocols
- ▶ Key Concepts to Building a program
- ▶ Practice
- ▶ Questions

# Basic Terminology

## ▶ Reps

- ❑ Short for repetitions. Repetitions define the number of times you perform an exercise. For example, you do 12 squats, then stop. The 12 squats you performed are considered 12 repetitions.

## ▶ Sets

- ❑ Refer to how many times you will repeat a given exercise for the set number of repetitions.
- ❑ For example, you do 12 squats and rest. Then you do another 12 squats, rest, and then another 12. You have now completed 3 sets of 12 reps.

## ▶ Rest/Active Rest

- ❑ Refers to the time period you will wait in-between sets
  - ❖ (different set/rep schemes call for different rest periods for optimal results).
- ❑ Active rest is when one completes an activity that is not stressing the same movement/muscles used in the workout during the time period between sets.
- ❑ For example, during a 1 min break between bench press sets an individual could complete a 1 minute plank.

## ▶ Load/Intensity

- ❑ The weight on the bar when referring to weight training
- ❑ Also refers to heart rate when doing cardiovascular or interval training (intensity)

## ▶ Volume

- ❑ The simple definition of volume is how much work you do, such as the number of reps you perform in an exercise.
  - ❖ If you were doing 5 reps of dead lift and then you increased it to 10 reps, you have increased the volume of your workout.
  - ❖ If you did 5 reps of dead lift and then increased the weight and did 5 more reps you did not increase the volume, but rather the intensity.

# Basic Terminology

## ▶ Super Set

- ❑ A superset involves 2 sequentially performed exercises that stress two opposing muscles

## ▶ Compound Set

- ❑ A compound set involves 2 sequentially performed exercises that stress the same muscle group

## ▶ Strength Pair

- ❑ 2 exercises paired together that are neither stressing opposing muscle groups nor the same (i.e., squat & bench press)

## ▶ Tri Set

- ❑ 3 exercises performed one right after another.

## ▶ Circuit

- ❑ More than 3 exercises performed in a row.

## ▶ 1RM

- ❑ 1RM stands for 1 rep max.
- ❑ This is the most amount of weight an individual can perform for a given exercise.
- ❑ It is often used to identify the amount of weight one should use for a desired outcome.
  - ❖ It is important to note that 1RM percentages are typically utilized for Multi-Joint exercises, not Single Joint

# Basic Movement Terminology

## ▶ Vertical Press

- *Examples: DB Shoulder Press, Push Press, Push Jerk, and Military Press*

## ▶ Vertical Pull

- *Examples: Pull Ups, Lat Pull, and Muscle Ups*

## ▶ Horizontal Press

- *Examples: Bench Press, DB Chest Press, and Push Ups*

## ▶ Horizontal Pull

- *Examples: Cable Row, DB Row, BB Row*

## ▶ Hip Dominant (Hip Hinging)

- *Examples: Dead Lift, KB RDL, Good Mornings and Glute Bridges*

## ▶ Knee Dominant (Squatting)

- *Examples: Back Squat, Front Squat, Goblet Squat, and Lunges*

## ▶ Rotary Stability (today's core)

- *Anti Extension (i.e., planks) and Anti Rotation (i.e., Band press out)*

# Types of Resistance Training Exercises

- ▶ All resistance exercises can be classified as either core or assistance based on the extent of joint involvement, size of the recruited muscles, and degree of contribution toward goals.

- ▶ Core Exercises

- ▶ Must meet two criteria:

1. Involve movement at two or more primary joints (**multi-joint exercise**)
2. Recruit one or more large muscle groups or areas

- ▶ Assistance Exercises

- ▶ Used to maintain muscular balance across joints, help prevent injury, rehabilitate a previous injury, or isolate a specific muscle or muscle group. Assistance exercises' must meet two criteria:

1. Involve movement at only one primary joint (**single-joint exercise**)
2. Recruit a smaller muscle group or only one large muscle group

# General Training Principals

## ▶ Specificity

- ▶ **SAID Principal:** *Specific Adaptations to Imposed Demands.*
- ▶ *Refers to training in a specific way to produce a specific change or result. For example, to strengthen the muscles of the arm, one must train the muscles of the arm. Also, when training for a certain activity or sport, the movement patterns of selected exercises should be very similar to movements used in the activity or sport.*

## ▶ Overload

- ▶ *A training stress or intensity greater than what the body is used to. Any training program will yield only limited results unless one experiences overload. Overload can be experienced by a change in weight lifted, more workouts in a week, increased or decreased sets/reps per exercise, shortening the rest periods, increasing the complexity of exercise, and so on and so forth.*

## ▶ Choice/Type

- ▶ *Exercise selection is influenced by specificity, time, equipment and experience. The most important factor in choice/type is the ability to properly perform the exercise. Novice lifters are often taught machine exercises or free weight assistance exercises first because they require less skill than free weight multi-joint exercises.*

## ▶ Order

- ▶ *Exercise order refers to placing the exercises in a specific sequence within a resistance training program. **One guideline for exercise arrangement is to start with power/explosive exercises which are followed by strength based multi joint exercises and ending with assistance and single joint exercises.** This is an effective sequence because power exercises require more effort, skill, and focus than strength based multi-joint or single joint exercises.*
- ▶ *Another way to think about this is to start with exercises that focus on power, followed by strength, then by hypertrophy and then ending with endurance.*

# Load/Intensity Protocols

## ► Load/Intensity

► Determined based upon selection from three main goals:

### 1. *Muscular Strength & Power*

- ❖ Often a goal of athletes interested in improving performance. Strength and power loads are much heavier and should be reserved to those with resistance training experience. Power exercises are particularly complex and focus more on speed and explosiveness than strength.

### 2. *Muscular hypertrophy*

- ❖ Often referred to as increased muscle mass. Many people with a hypertrophy goal state, "I want to be sculpted," or "I want more size." Hypertrophy is the increasing size of the muscle fiber>

### 3. *Muscular Endurance*

- ❖ The outcome of training for greater muscular endurance is an enhanced ability of the targeted muscles to perform at sub-maximal level for many repetitions or for an extended duration.

Training Goal	Load (%1RM)	Goal Repetitions	Sets	Rest
<b>Muscular Strength</b>	≥85%	≤6	2-6	2-5 minutes
<b>Power</b> <ul style="list-style-type: none"><li>• Single Effort Event</li><li>• Multiple Effort Event</li></ul>	Single: 80-90% Multiple: 75-85%	Single: 1-2 Multiple: 3-5	Single: 3-5 Multiple: 3-5	2-5 minutes
<b>Hypertrophy</b>	67-85%	6-12	3-6	30-90 seconds
<b>Muscular Endurance</b>	≤67%	≥12	2-3	<30 seconds

## Power/Explosive



*Power is defined as the ability to generate as much force as fast as possible. Power requires strength and speed to develop force quickly. The load or resistance must be heavy enough to allow for maximal force to be applied but not so heavy that the exercise is performed too slowly. All power/explosive exercises are Multi-Joint exercises*

*Strength is the amount of force a muscle, or group of muscles, can exert against an external load. Speed of the movement is not important when testing strength. All strength exercises will be performed using Multi-Joint Exercises.*



## Strength

# Key Concepts to Building a Program: Exercise Order

- **WARM UP!!!!!!!**
- **Power**
  - ❑ Core Multi-Joint Complex Exercises
  - ❑ Most CNS Fatiguing
  - ❑ Demands the most technique
  - ❑ Includes Plyos & True Agility
  - ❑ Least reps longest rest
- **Strength**
  - Less complex non speed focused Core Multi Joint Exercises
  - Can be paired in super sets (at times)
  - Moderate reps/rest
- **Hypertrophy/Endurance**
  - Dominantly assistance exercises
  - Can be circuit focused
  - Higher reps less rest
- **Intervals/Metabolic Cond.**
  - Work to rest ratio's dependent on current fitness level and location in program

		Day 1					
		<b>Warm up</b>					
		P1	Foam Roll				
		P2	Dynamic Mobility				
		P3	Dynamic Running				
		P4	Band Activation				
Phase 1	Power	Type	Explosive Lifts	sets	reps	wt.	rest
		Notes					
		90 sec. post AR					
Pair w/ 60 sec of active rest:				SM Correctives			
Phase 2	Strength Super Set	Type	Knee Dominant, Dbl Leg	sets	reps	wt.	rest
		Notes					
		60 sec. post AR					
Pair w/60 sec of active rest:				Core			
Phase 3	Strength/Hypertrophy Tri	Type	Knee Dominant, Sngl Leg	sets	reps	wt.	rest
		Notes					
		90 sec.					
		Type	Horizontal Press			wt.	
		Notes					
		Type	Horizontal Pull			wt.	
		Notes					
Phase 4	Finisher	Finisher Name:					

# Key Concepts to Building a Program: Programming for Imbalances

► It is imperative to balance opposing movements:

- ❑ = amount of Vert. Pull to Vert. Press
  - ❑ = amount of Hor. Pull to Hor. Press
  - ❑ = amount of Hip Dom to Knee Dom.
  - ❑ Rotary Stability (core)
    - = amount of Anti Ext to Ant Rot
    - = amount of crawl to carry
- ❖ *This is less important than the first 6*

**Four-Day Workout Program**

Day One	Day Two	Day Three	Day Four
Movement Skills and Conditioning — One hour			
Warm-up Linear	Warm-up Multi-directional	Warm-up Linear	Warm-up Multi-directional
Linear Speed Plyometric	Lateral Speed Plyometric	Linear Speed Plyometric	Lateral Speed Plyometric
Linear Conditioning	Lateral Conditioning	Linear Conditioning	Lateral Conditioning
Torso Power — Med Ball	Torso Strength/Stability	Torso Power — Med Ball	Torso Strength/Stability
Power and Strength Development — One hour			
Explosive — Olympic	Upper Body	Explosive — Olympic	Upper Body
Stretch — Quad and Psoas			
<b>Pair One</b>	<b>Pair One</b>	<b>Pair One</b>	<b>Pair One</b>
Knee-dominant, Double-leg	Horizontal Press, Supine	Knee-dominant, Double-leg	Horizontal Press, Incline
<i>Stretch — Lat</i>	<i>Stretch — Chest</i>	<i>Stretch — Lat</i>	<i>Stretch — Chest</i>
Vertical Pull	Hip-dominant Straight-leg	Vertical Pull	Hip-dominant Straight-leg
<b>Tri-set One</b>	<b>Tri-set One</b>	<b>Tri-set One</b>	<b>Tri-set One</b>
Knee-dominant, Single-leg	Vertical Press or Rehab/Specialty	Knee-dominant, Single-leg	Vertical Press or Rehab/Specialty
Horizontal Pull	Hip-dominant Bent-leg	Horizontal Pull	Hip-dominant Bent-leg
<i>Stretch — Rotational</i>	<i>Stretch — Hamstrings</i>	<i>Stretch — Rotational</i>	<i>Stretch — Hamstrings</i>
Rotary or Rehab/Specialty	Rotary or Rehab/Specialty	Rotary or Rehab/Specialty	Rotary or Rehab/Specialty

# Key Concepts to Building a Program: Active Rest

## ▶ Active Rest

❑ Need to not stress what is currently being worked

- ✓ Rotary Stability (Core focused)
- ✓ Mobility Focused
- ✓ Corrective Focused

▶ Active rest allows for one to get the most bang for their buck in their work out

▶ Make one hour count!

Day 1						
Warm up						
P1	Foam Roll					
P2	Dynamic Mobility					
P3	Dynamic Running					
P4	Band Activation					
Phase 1 Power	Type	Explosive Lifts	sets	reps	wt.	rest
	Notes					
						90 sec.
						post AR
Pair w/ 60 sec of active rest: SM Correctives						
Phase 2 Strength Super Set	Type	Knee Dominant, Dbl Leg	sets	reps	wt.	rest
	Notes					
						60 sec.
						post AR
Pair w/60 sec of active rest: Core						
Phase 3 Strength/Hypertrophy Tri	Type	Knee Dominant, Sngl Leg	sets	reps	wt.	rest
	Notes					
						90 sec.
	Type	Horizontal Press			wt.	
Notes						
	Type	Horizontal Pull			wt.	
Notes						

# Getting Started

## ▶ Identify Your Goal

- ❑ Loose/gain weight?
- ❑ Increase performance for a sport?
- ❑ Get stronger/faster?
- ❑ General Fitness?

## ▶ Identify where your training status lies

- ❑ *Have you trained before?*
- ❑ *What have you liked in the past?*
- ❑ *What has worked for you in the past?*

## ▶ Weekly Schedule

- ❑ *Days per week*
- ❑ *Time per session*

Resistance Training Status	Current Program	Training Age	Frequency (per week)
Beginner	Not training or just began	< 2 months	2-3
Intermediate	Currently Training	2-6 months	3-4
Advanced	Currently Training	≥ 1 year	4-7

**Practice**



# Programming: Final Notes

- ▶ Macro-Cycle
  - ▶ *Engulfs Entire Program*
  - ▶ *Usually nine months to a year in length*
  - ▶ *Difficult to establish with many PT clients (typical for athletes)*
- ▶ Meso-Cycle
  - ▶ *The 3 to 4 main chunks that make up the Macro-Cycle*
  - ▶ *Usually 3-4 months in length*
  - ▶ *Each has a specific focus (i.e., power, strength, endurance, sport specifics, etc.)*
- ▶ Micro-Cycle
  - ▶ *3-4 chunks of Meso-Cycle*
  - ▶ *3-4 weeks in length including a de-load*
  - ▶ *Pertains to the goal of the Meso-Cycle using the principal of overload throughout the Meso-Cycle in each Micro-Cycle*

# Questions?

