



BRIAN DANLEY FITNESS

PRINCIPLE OF PROGRESSIVE OVERLOAD

As your muscles get stronger, greater resistance is needed to stimulate strength increases (i.e., increase loading by 5% each set)

PRINCIPLE OF PERIODIZATION

Parameters within training programs are cycled so as to keep it “fresh” and to optimize performance (i.e., decrease reps while increasing loads, changing exercises, etc.)

RANGE OF MOTION (ROM)

- Eccentric motion--- occurs when muscle lengthens (i.e., lowering the weight during curl)
(muscular force < resistive force)
- Concentric motion--- occurs when muscle shortens (i.e., raising the weight during curl)
(muscular force > resistive force)

TYPES OF MOTION

- Isotonic exercise--- ROM under *constant* resistance; incorporates eccentric & concentric motion
(**muscular force \neq resistive force**)
- Isometric exercise--- *no* ROM under resistance; occurs when force exerted against immovable object
(**muscular force = resistive force**)
- Isokinetic exercise--- ROM under *variable* resistance; maximum force of resistance to accommodate strength level
(**muscular force \neq resistive force**)

TYPES OF RESISTANCE TRAINING

- Muscular strength--- amount of force muscle generates thru ROM
(**strength = force * distance**)
- Muscular power--- amount of strength during certain time period
(**power = strength / time**)
- Muscular endurance--- repeated muscular contractions with submaximal resistance

RESISTANCE TRAINING PARAMETERS

- Exercise selection--- targets certain muscles
- Exercise order--- how exercises are arranged during workout (i.e., prioritize larger muscles before smaller muscles)
- Exercise speed--- exercise pace (i.e., 2s concentric motion; 4s eccentric motion)
- Set--- comprises a group of repetitions (i.e., 1-3 sets)
- Reps--- make up a set (i.e., 8-12 reps/set)
- Load--- amount of resistance or weight (i.e., 75% 1-RM)
- Frequency--- how often a workout occurs during week (i.e., 3 days/wk)
- Rest period--- amount of time between sets (i.e., 2 mins)

TRAINING STRATEGIES

- Pre-exhaust set
- Partial reps to failure
- Alternate heavy-light sets
- Alternate high-low reps
- Supersets
- Compound sets
- Trisets
- Giant sets
- Instinctive training
- Push-pull training
- Unilateral training

- Drop sets
- Hypertrophy training (i.e., 8-12 reps)
- Lean training (i.e., 12-25 reps)
- Power training (i.e., 1-6 reps)
- Circuit training
- Interval training
- Upper-lower body training
- Static stretch training
- Plyometric training
- Speed training
- Core training