SPIDERMAN'S HOME EXERCISE ROUTINE

A Physical Fitness Program For Novices

Summary

Low Frequency: Three workouts for resistance training and three separate workouts for aerobic activity every week

M - Chest Th - Back

Sa – Arms

17n

High Frequency: Five workouts for resistance training and five separate workouts for aerobic activity every week

M-Chest T-Legs Th-Back F-Abs Sa-Arms

Contents

Dogistance Training Domindorg

Resistance Training Reminders	1 / p.
Lifting Schedule	13 p.
Aerobic Activities	13 p.
Dietary Supplements	5 p.

Stretches 7 p.

Lifting Record 6 p.

RESISTANCE TRAINING REMINDERS

OVERVIEW

Time

Plan A: Reserve one hour in the morning 3-5x/week

1. Eat / Stretch

10 min.

2. Resistance Training

40 min.

3. Stretch / Eat

10 min.

Plan B: Improvise

If you are unable to schedule time for even an abbreviated exercise session on any one day, try replacing the workout by strenuously simulating the motions of the session without weight (either during a break or by multi-tasking).

If your schedule does not allow you to exercise three times per week, try just doing the resistance workouts that target muscles most important to you, and supplement your routine with as much aerobic activity as possible.

Equipment: Inexpensive Options

Low-cost equipment (items found around the house or purchased second-hand) can provide a diversity and quality of exercise comparable to that of any gym, but in the convenience of your own home. The "Resistance Training Schedule" detailed below mostly involves exercises performed using

Total Gym (TG)

Bench press with up to 250 lbs.

Perfect Pushup discs

Perfect Pullup apparatus

A thick weight-bearing belt with two hooks on the sides, free weights (2x5 lb., 2x10 lb.) each tied to a string with an open loop

A backpack (with a waist strap) that can hold weights.

Dumbbells

Two parallel countertops slightly greater than shoulder-width apart (for dips)

Water barrels

Grip-rod tied to weight

A well-ventilated room

Exercise sneakers

Water

Fan

Two towels (one for clean items, one for sweat and padding)

Exercise ball -3 ft. diameter

Your willingness to exercise strenuously combined with this workout regimen

ROUTINE CHECKLIST

Before Lifting

A. Organize Workout

<u>Choose</u> – Select the day's resistance exercises and write them down on the last page of this document below your previous entry for that muscle group, which should consist of a series of exercises different from the new one.

Note: The archive of your lifting schedule on the last page is formatted for a lowfrequency routine that includes only chest, back and arms. The abdominal and aerobic exercises listed in this document are not nearly so numerous as the lifting ones and do not require such precise accounting.

<u>Setup</u> – Set out any equipment so that your workout space is ready for use at a moment's notice.

<u>Review</u> – Peruse this entire routine checklist (A-H).

B. Eat

Eat 15 Minutes Before Workout

Glutamine juice (consume this first, wait fifteen minutes, then eat the rest)

Power bar

Banana (½ before, ½ after)

Melatonin

See "Dietary Supplements" for more info.

C. Stretch

<u>Warm-Up Stretches</u> – Stretch back and arms (see "Stretches: General Stretches")

<u>Energy Boost</u> – In order to raise your energy level, next perform the following two sets of squats using 1" wedge-lifts below your heels:

One set of slow squats into a chair

One set of strenuous squats (see "Day 2: Legs")

Stretch Targeted Muscles

Start Lifting: With 5 easy light-weight

reps of your first

exercise

When Off-Set: Simulate the motion of

your current exercise weightlessly

Finish Lifting: With 50 easy light-

weight reps of your first

exercise

During Lifting

D. Diversify Routine

Exercises – From week to week vary muscle movements by changing the order and constituency of exercises for a targeted muscle group. Additionally, from exercise to exercise design your day's workout so that you vary your muscle motions to a maximum degree in order to achieve muscle confusion (the prerequisite for calorie-burning muscle growth).

Ex. Do not perform a series like "flat bench press, regular pushups and flat bell press" because the exercise motions are too similar. Instead, do a series like "flat bench press, incline bench press, wide-grip P-pushups". When you exercise the same muscle group the following week, make sure that the series of exercises (especially the first one) is as different as possible from the series "flat bench press, incline bench press, wide-grip P-pushups", such as "Narrow-grip P-pushups, dips, regular P-pushups".

Weight – A weight-lifter's adage maintains that "smart lifting involves challenging your muscles during as many of your reps as possible." In pursuit of this goal, always try to increase the amount of weight that you lift. From week to week and set to set, try to employ an ascending weight scheme in order to maximize musclebuilding "burning" reps and prevent either fixedweight adaptation or descending-weight facility. If you wish to ascertain your personal 6-10 rep maximum weight resistance for an exercise (when performed without any preceding muscle fatigue), perform this set separately from the workout at a time that does not interfere with muscle recovery (use the assistance of a spotter, if necessary).

Ex. First Exercise

Set 1: 12 reps at 70% maximum exertion

> +5 lbs

Set 2: 10 reps at 80% maximum exertion

> +5 lbs

Set 3: 8 reps at 90% maximum exertion

> +5 lbs

Set 4: 6 reps at 100% maximum exertion

<u>Frequency</u> – Every 2nd week in the month, skip arms and do chest and back 2x/wk. Every 3rd week in the month, do high repetition workouts for chest and back, and do arms twice.

<u>Miscellaneous</u> – Like the once-a-month exception to the frequency rule, every fourth week defy one of the other rules for this routine governing:

Speed of motion, # of reps, # of sets, rest time in between sets (whereas rest time in between workouts should always be 48-72 hrs.), the addition of multiple supersets or drop-sets or negatives onto the end of sets

E. Resistance Levels for Body-Weight Exercises

Perfect-Pushups (P-pushups)

- 1 Incrementally increase your feet's elevation on a staircase
- 2 Normal elevation
- 3 On your knees

4 – On a wall in a narrow hallway, incrementally increase your body's angle using sturdy boxes of various sizes as heel stops

Dips, Chinups (not supine) and Pullups

- 1 Incrementally increase the resistance of the weighted belt or backpack
- 2 Unweighted and unassisted
- 3 Incrementally diminish the resistance of your body weight with your feet on the ground, a chair or stair

Hand-Stand Pushups

- 1 Unassisted
- 2 Resting your elevated heels on a wall
- 3 Resting your lowered feet on a stair or chair
- 4 Kneeling on a chair

Triceps Pushups

1 – Heels on ground while standing

- 2 Heels on ground while upper body is supported on a stair or chair
- 3 Heels on an elevated surface that is still lower than your upper body
- 4 Heels on an elevated surface that is at the same height as your upper body

TG Exercises

- 1 Incrementally increase the angle of the incline
- 2 Incrementally increase the resistance of the weighted belt or backpack

Squats

- 1 With towel-padded bar
- 2 Holding two water jugs or one 45 lb. bucket

F. Proper Sets

Number of Sets

In the Workout – After doing 4 sets for the first exercise of the day, do 3 sets for all remaining exercises.

Per Muscle Group – The number of sets to perform for a single muscle group varies depending on its size.

Legs	16
Chest	16
Back	16
Abs	12
Shoulders	10
Triceps	6
Biceps	6
Forearms	3

Resting – From set to set, allow 30-second rest periods in between sets. From session to session, allow muscle groups one week to recover between rigorous resistance training. 48-72 hours after rigorous lifting, exercise the same muscle group moderately.

Ex. To train the chest:

1 – On Monday you perform sixteen sets (30 seconds exercising plus 30

seconds resting each) of various exercises like bench press that target the chest

- 2 On Thursday, after resting your chest for 72 hours, you work the chest as a secondary muscle group while doing exercises like pullups that target the back.
- 3 You then cease any resistance training of the chest until Monday.

Muscle Failure – Work until muscle failure only on the final set (Sets 1>4: 70%>100% power). If you cannot increase the amount of weight lifted sufficiently either by adding weights or changing the angle or grip of an exercise, then work until muscle failure on every set. Prioritize those exercises for which you can increase the amount of weight lifted.

Note: If you are beginning an exercise routine while you are out of shape, only perform a fraction of any one day's total exercises at only moderate intensity with relatively little weight. From week to week, gradually increase the amount of exercise until you are performing the recommended amount. As with aerobic activities, only perform those exercises that you can

manage safely. Due to the highly limited nature of these early workouts, dietary supplements for muscle building are not necessary at this time.

Supersets / Drop-Sets / Negatives

Perform one of these special sets only once or twice per workout session. Never do these special sets for secondary-muscle exercises (like triceps/shoulders on chest day, or biceps on back day).

Superset – After performing the final rep of an exercise (to the point of short-term muscle exhaustion), extend the exercise by immediately continuing the resistance motion with lesser weight. When exhausted at this weight, reduce the weight again and continue the motion to exhaustion.

Drop-Set – After performing the final rep of an exercise (to the point of short-term muscle exhaustion), extend the exercise by resting the weight for 5 seconds and then continuing the motion, repeating this process to exhaustion.

Negatives – During the negative side of

your repetitions (when your motion submits to gravity), slow your motion as much as possible so that it takes 5 seconds to bring the weight from the peak of the repetition to the trough.

G. Proper Repetitions

<u>Grip</u> – Firmly grip the apparatus or otherwise securely place your hands in the appropriate places for the exercise.

<u>Target Muscles</u> – Focus your physical exertion on the muscles that you are trying to work.

<u>Rep Motion</u> – Consistently maintain smooth, controlled movements in your repetitions that maximize your range of motion.

- 1 On the positive side of the cyclical motion (the side that is harder to move quickly because you are opposing gravity), do the motion more quickly approximately 1 second up.
- 2 At the peak of the rep, flex targeted muscles tightly.
- 3 On the negative side of the motion (with gravity), do the motion more slowly approximately 2-3 seconds down.

4 - Do not rest the weight at any time during the set (unless you are doing the final repetitions of a drop-set).

Breathing

Up – As you oppose gravity on the positive side of a set's cyclical motion, breath out through your mouth.

Down – As you submit to gravity, breath in through your nose.

After Lifting

H. Optional Aerobic Finale

If necessary, do a minor aerobic exercise for fifteen minutes at the end of the workout. Ideally, do 4 30-second sprints with 30-second breaks and 5 minutes of warm-up and cool-down walking.

Note: Only combine resistance and aerobic training if there is no other time that your schedule allows you to exercise. Otherwise, separate the two workouts by as many hours as possible. However, do not exercise too close to bedtime.

I. Post-Gym Activities

Eat and Stretch Immediately

Glutamine juice

Consume this first, do final 50-rep lightweight set and stretch lower back while waiting for fifteen minutes, then eat the rest

Banana (remaining half)

Honey

Green tea

Vitamins

Super Foods powered vitamin water

Protein Shake

(See "Dietary Supplements" for more info)

Stretch Targets

1 – Effortlessly – Later in the day, gently stretch the day's targeted muscles by simulating some of the exercise motions.

2 – Strenuously – Most importantly, perform these stretches vigorously (2 sets of 6 reps) 30 minutes after ingesting a high-protein shake (60 minutes for a high-protein meal) in order to increase protein-rich blood flow to those muscles during their recovery period.

<u>Stretch Others</u> – Stretch any other sore muscles (see "Stretches").

LIFTING SCHEDULE

CHOOSE EXERCISES

- 1. Adhering to the chronological order of the routine described in the following pages, choose the recommended number of exercises for the muscle groups targeted in your upcoming workout. Select exercises that maximize the diversity of motion on that day while proceeding in an order and constituency different from any series of the same exercise group that you performed in recent weeks.
- 2. Record your selections in your current "Lifting Record" (last pages).

DAY 1: CHEST

Primary Compound Exercises (choose 3)

Flat bench press (feet resting on bench)

Incline bench press

P-pushups regular-grip

P-pushups wide-grip

P-pushups narrow-grip

Wide-grip dips

Narrow-grip dips

Flat dumbbell butterfly press

Incline dumbbell butterfly press

TG incline pushups

TG seated pully press on incline

Followed by a superset or drop-set in which you again perform your first exercise from this series of 3

Secondary Compound Exercises (choose 2)

Flat dumbbell press

Incline dumbbell press

TG seated pully butterfly press on incline

TG supine pully press on incline

TG supine pully butterfly press on incline

Followed by a superset or drop-set in which you again perform your first exercise from this series of 2

Triceps / Shoulders (choose 1)

Military press

TG military press

1-heavy-dumbbell military press

2-light-dumbbells military press

2-light-dumbbells hammer-grip military press

DAY 2: LEGS

Perform twice as many repetitions (12-24 per set) as normal.

Compound Exercise (1)

Squats (with 1" wedges underneath heels)

Followed by 3 sets of slow squats into a chair with the same heel wedges

Upper-Legs on TG (2)

One-leg squat on back (each side)

2-leg squat on back

One-leg squat on side (each side)

Note: Do not use the weighted belt on this TG sidesquat exercise or the next one called "sprinterkneeling"

One-leg squat in sprinter-kneeling position (each side)

Upper-Legs Manually (2)

Curtsy squat jump

Squat jump

Standing hip raise

Standing thigh raise

Kneel forward while holding dumbbells

Kneel backward while holding dumbbells

Quadriceps extensions on weight bench

Hamstring curls on weight bench

Supine hip thrust (hold rep crest for 5 sec)

Calves (1)

One-legged calf raises on a stair step, arms raised forward and suspended at shoulder level (weighted belt optional)

DAY 3: BACK

Primary Compound Exercises (3)

P-pullups regular-grip

P-pullups narrow-grip

P-chinups regular-grip

P-chinups wide-grip

P-chinups narrow-grip

P-pullups hammer-grip wide

P-pullups hammer-grip narrow

Supine P-chinups regular-grip (heels on chair or stair)

Note: Do not use weighted belt for supine chinups

Supine P-chinups narrow-grip

Supine P-chinups wide-grip

Supine P-pullups hammer-grip wide

Supine P-pullups hammer-grip narrow

Standing bent-over lat row with bar

Vertical-ladder climb hands-only

Followed by a superset or drop-set in which you again perform your first exercise from this series of 3

Secondary Compound Exercises (2)

TG narrow-grip chinups

TG wide-grip chinups

TG narrow-grip pullups

TG row

Water-barrel to dumbbell one-arm lat rows

TG front pull-over

TG side pull-over

TG pully pullups

TG pully chinups

Water-barrel shrugs

Shrugs with bar

Followed by a superset or drop-set in which you again perform your first exercise from this series of 2

Biceps (1)

Preacher curls bar regular-grip

Dumbbell curls regular-grip seated on incline

Dumbbell curls hammer-grip seated on incline

TG curls seated

TG curls supine

DAY 4: ABS

Choose one of the following exercise groups. Do each motion until muscle failure for three consecutive sets with 30 second rest periods. One exercise group should last 10-12 minutes.

TG leg raises with: Straight-legs / Bent knees / Obliques

TG oblique pully pull / Pushup plank (stationary push-up form with forearms on ground)

TG incline oblique crunches / Roller wheel

Hanging leg raises using armpit straps with: Straight-legs / Bent knees / Obliques

Situps (with purple assistant) / Resting-long-bar-on-shoulders trunk twist side-to-side / Back raises

Tony Little device for crunches targeting: Upper / Lower / Obliques / Lower back

Exercise ball situps targeting: Upper / Lower / Obliques / Lower back

Finale Set: Raised push-up form with one-arm-stand rotation

Core Workout with Exercise Ball – See the final six stretches in "Stretches – Static Stretch Therapy"

DAY 5: ARMS

Primary Compound Exercises (2)

Hand-stand pushups

Military press regular-grip

Military press wide-grip

Military press narrow-grip

1-heavy-dumbbell military press

1-heavy-dumbbell military press hammer-grip

Raises front with short bar hammer-grip wide

Raises front with short bar hammer-grip narrow

Raises front with short bar narrow-grip

Raises front with short bar regular-grip

TG military press

Followed by a superset or drop-set in which you again perform your first exercise from this series of 2

Secondary Compound Exercises (1)

Dumbbell raises side

Dumbbell raises front

Dumbbell military press

Dumbbell hammer-grip military press

TG supine shoulder raises front

TG supine shoulder raises side

Followed by a superset or drop-set

Triceps (1)

Overhead dumbbell pull seated

Overhead dumbbell pull supine

Overhead bar pull supine regular-grip

Overhead bar pull supine narrow-grip

TG pull-down (elbows always touching ribs)

Elevated triceps pushups side-grip

Biceps (2)

Preacher curls bar regular-grip

Preacher curls bar wide-grip

Preacher curls bar narrow-grip

Preacher curls dumbbell (each side separately)

Dumbbell curls regular-grip seated on incline

Dumbbell curls hammer-grip seated on incline

Concentration curls

Long-bar curls

Short-bar curls narrow-grip

Short-bar curls wide-grip

Short-bar curls hammer-grip wide

Short-bar curls hammer-grip narrow

Short-bar curls reverse regular-grip

Short-bar curls reverse wide-grip

Short-bar curls reverse narrow-grip

TG curls seated

TG curls supine

Followed by a superset or drop-set in which you again perform your first exercise from this series of 2

Forearms (1)

Palm roll with grip-rod

Forearm curls bar

Forearm curls bell

Reverse forearm curls bar

Reverse forearm curls bell

AEROBIC ACTIVITIES

OVERVIEW

Time

Plan A: Reserve 30-110 minutes 3-5x/week anytime not within 12 hours of a lifting workout

1. Eat / Stretch 10 min.

2. Optional Abs Sets 10 min.

3. Aerobic Training 10-90 min.

4. Stretch / Eat 10 min.

Plan B: Improvise

If you are unable to schedule time for aerobic exercise on any one day, try replacing the workout by strenuously engaging in an aerobic work activity or by simulating an aerobic exercise standing in place (either during a break or by multitasking).

Equipment: Inexpensive Options

Low-cost equipment (items found around the house or purchased second-hand) can provide a

diversity and quality of exercise comparable to that of any gym, but in the convenience of your own home. The "Aerobic Training Options" listed below mostly involve exercises performed using

Total Gym (TG)

Stairs

Jump Rope

Bike

Basketball Hoop and Ball

Hacky Sack

OPTIONS

- 1. <u>High-Intensity Interval Training (HIIT) Sprints</u>
 - 8 30-second sprints w/ 30-second breaks
 - i. Do a small sprint to warm-up
 - ii. Walk or juggle hack to cool-down

2. <u>Basketball</u>

Warm-Up

- i. Alternate left / right lay-ups
- ii. Grounded shots
- iii. Jump shots

Pre-Move

Dribble fast while spinning the ball with your fingers

Shooting

- i. Aim just over the front of the rim
- ii. Backspin on the ball

- iii. Follow-through the shot with your arms outstretched toward the hoop
- 3. <u>Juggle Hack While Walking And Running</u>

Include intervals of fire-feet sets

- i. Low crouch
- ii. Fast feet
- iii. Catch hack with hand
- 4. Slow Squats / Power Jump-Squats Onto Platform
- 5. <u>Jump Rope / Run Stairs</u>
- 6. TG Flat Row / TG Speed Squats
- 7. Foot Speed Training

Time:

- i. 1-minute duration for each of the following exercises
- ii. 1-minute breaks
- iii. Repeat series until exhausted

Cyclical Leg Motions:

 $//--\setminus$, \wedge --X, \wedge --I/-- \wedge --\I, fire feet

8. <u>Squat Speed Training</u>

Time: Same as for above "Foot Speed Training"

Cyclical Leg Motions:

Squat power-slide, curtsy squat thrust, squat jump, knees to chest vertical jump, vertical leap, run and long jump

- 9. Biking
- 10. Power Walking
- 11. Climbing Activities

Options

- i. Rapidly ascending trees and structures
- ii. Roofing construction
- iii. Vertical ladder climb

12. X-Box Kinect Exercise Video Games

Only do aerobic routines that do not include signficant resistance training

NOTES

Motivation

Exercises

Frequently choose exercises that you most enjoy. Both sports games and variety can be great motivators in an aerobic routine.

Buddy System

As with anaerobic exercise, do not rely on a buddy system to trigger your commencement of a workout. Plan to exercise alone and any company will be a pleasant bonus, not a burdensome prerequisite.

Stretch

Warm-Up

Before beginning cardiovascular exercise, perform dynamic stretches for the trunk and legs (see "Stretches"), and then soft simulations of the exercise's motions.

Pace

Upon beginning, gradually ease into your workout pace with slow and steady incremental increases in your speed.

Cool-Down Stretch

Walk at a moderate pace until heavy breathing subsides

Perform static stretches for the lower back and legs.

Limits

Session Duration

Exercise at a pace of maximum healthy exertion for 15 minutes -2 hours. This time duration depends on the innate difficulty of the exercises performed as well as the workout's proximity to resistance training.

Rest Periods

Slowly walking, take 30-second breaks for water every 10 minutes.

Session Scheduling

In aiming to achieve 3-5 aerobic workouts per week, you do not want the timing or amount of your aerobic exercise to diminish your body's energy reserves that are required for muscle growth.

1 – Limit the amount and intensity of aerobic exercise on chest, back and arms days.

2 – Separate the resistance training from the cardiovascular exercise by doing the lifting in the morning and the aerobic in the afternoon or at any point during a non-lifting day.

Monotony

Diversify the cardiovascular workout by reserving roughly half of your 3-5 weekly sessions for exercises that differ from your normal aerobic routine.

Abdomen

Scheduling

Try including an abdominal workout (Day 4) as a preliminary to the cardiovascular exercise. Since aerobic exercise works the abs, it can provide enhancement to resistance training of this particular muscle group. The abdomen requires less energy to exercise and recover so that we can do the optional Day 4 (a 15-minute workout) as many as two times a week at any convenient point during the day. On the other hand, the remaining resistance workouts we must do only once a week in the morning for one hour, and ideally separate from any aerobic activity or any resistance exercise of other muscle groups. Since it is generally expeditious to combine your workouts into as few time frames as possible, we combine those that we can – the abdominen (15 minutes) and aerobic (10-90 minutes).

Targeting

When determining how much you would like to focus your workouts on the abdomen, keep in mind that many of the other primary exercises (pushups, pullups, dips, aerobics) already work the abdomen as a secondary muscle group. Furthermore, shedding belly fat through cardiovascular exercise helps to train and define the abdomen more effectively than abdominal resistance training. For some individuals on a low-frequency exercise schedule, no abdominal exercise may be required. For others, 1-2 times per week (but no more) may prove beneficial.

Shortcomings of Cross Training

Despite definite benefits to cross training (its diversity of exercises, its ability to motivate gym-goers with the lure of a game), critical shortcomings limit its effectiveness at muscle training. Although circuit training could be occasionally implemented in a workout regimen (4-6 weeks per year) for purposes of aerobic enhancement, motivation, and movement variety, sustained usage of this exercise method sacrifices muscle training for a disproportionate emphasis on aerobic training.

Energy Flow – Spread across the entire body to power all muscles and intensive aerobic requirements during a single hour's workout, rather than partitioning your exercise time to focus sessions exclusively on specific muscle groups in a week's succession of one-hour

workouts that separates aerobic from anaerobic activity.

Blood Flow – Spread across all muscles during a one-hour session, rather than regularly focusing in one muscle group

Muscle Recovery Time – Shortened at the expense of calorie-burning muscle development in deference to the priority of aerobic exercise

Circuit training diminishes the potential benefits of muscle building, including intensive calorie burning and strength augmentation. By first reducing the energy and blood flow required to work muscles effectively, and then depriving them of necessary recovery time, cross training counteracts muscle building. Alternative exercise regimens can achieve greater aerobic and anaerobic benefits through less intensive workouts that use your body's energy and circulatory system more efficiently while respecting muscle-recovery requirements.

HIIT

Benefits

High-intensity interval training is the best aerobic exercise for maximizing aerobic and anaerobic benefits. Accomplishing in 7.5 minutes the aerobic equivalent of an hour-long jog, HIIT sprints also provide greater resistance training for leg muscles.

Perhaps most importantly, HIIT sprints dramatically stimulate the natural production of human growth hormone that in turn amplifies full-body muscle growth. This physiological fact about sprinting appears glaringly obvious in the physiques of professional sprinters.

Scheduling

In order to gain maximum benefit from this natural-HGH source without draining the body's supply of muscle-building fuel after lifting workouts, perform either:

Half of a HIIT workout (4 sprints) in the afternoon following a lifting session, or

A complete HIIT workout (8 sprints) in the morning the day after a lifting session

While additional aerobic activities during off days could augment general physical fitness, the three sprinting sessions alone can suffice.

Machines v. Body-Weight Exercises v. Free Weights

Free Weights Rule

Exercises with free weights are the best option for muscle building because you (1) must balance the weight yourself and (2) can easily increase the

amount of weight. However, since free-weight training is the most rigorous anaerobic exercise, it is also the easiest way to injure yourself. Care should be taken when starting resistance training such that free weights are used only after you have achieved a comfortable level of training with machines and bodyweight exercises.

The Two Lesser Options

These two other forms of resistance training have their drawbacks. Machines remove the burden of balancing the weight of an exercise, diminishing the potential rigor and effectiveness of muscle-building workouts. Body-weight training also has this limitation to a degree, since you are naturally comfortable balancing your own weight. Furthermore, body-weight training is limited by difficulty in increasing the amount of weight lifted. Static-weight training allows muscle memory to kick in, which in turn eases the strain on the muscles and overrides muscle building. However, if you can manage to increase the weight of body-weight exercises with weighted belts and inclined surfaces, this form of resistance training can be almost as effective as free weights.

Incorporating the Mix

Ideally you should focus your workouts primarily on free-weight or augmented body-weight resistance training. This applies especially to the first 2-3

exercises of your session identified in the "Lifting Schedule" as "Primary Compound Exercises". For later exercises, include a measure of body-weight and machine exercises in order to vary muscle movement to a maximum degree. Also, these less rigorous forms of resistance training will reduce the risk of injury by diminishing the strain on muscles towards the end of intensive lifting sessions when the targeted muscles have already been exercised to near-total exhaustion.

DIETARY SUPPLEMENTS TAKEN ON RESISTANCE TRAINING DAYS

In addition to healthy dietary and sleep habits, adhere to the following schedule for supplements on lifting days in order to feed the added dietary requirements of the targeted muscles.

TOTAL DAILY CONSUMPTION

- 3 x 30 g whey protein shake
- 2 x 5 g glutamine water mix
- 2 x 3 mg melatonin capsules

Vitamins

Capsules after post-muscle-workout meal including a multivitamin, Omega-3, Glucosamine Chondroitin, E, B, C, Calcium Magnesium, Lecithin – use Orgain nutritional drink / Clif power bars for vitamin intake at other times

Green tea

1 banana and 1 tablespoon of honey

Instant oatmeal is a good combination with these two

Alternative To Protein Shakes And Power Bars: Peanut-butter (almond-butter) sandwich with banana slices + honey

SCHEDULE

Pre-Workout

5 g glutamine with juice (upon waking up)

Power bar

Banana (1/2 before, 1/2 after)

3 mg melatonin

During Workout

Hydrate after every set or exercise

Post-Workout

5 g glutamine with juice

Take this before the final 50-rep set, cleaning up weight room and stretching, then eat the rest

Banana

Honey

Protein shake (No more than 30 g protein)

Vitamins

Green tea

Super Foods powered vitamin water

Lunchtime and Dinnertime

Healthy high-protein meals with protein-shake snacks (or peanutbutter sandwich on whole wheat with milk) and Super Foods powered vitamin water two hours after main meals

Right Before Bedtime

5 g glutamine with water

3 mg melatonin (both right before bed)

NOTES

Main Meals

Food: Aim for a diet high in protein, whole grains, fruits and vegetables that avoids fatty and processed foods in favor of leaner whole foods.

Drinks: Try to drink one gallon of water daily while avoiding sodas in favor of dark-berry juices (cranberry, grape) free of refined sugars and rich in anti-oxidants.

Protein and Vitamin Supplements: Schedule your supplemental protein and vitamin intake for ½ hour after a main meal. This avoids having the protein burned up as fuel for your body's other energy requirements because your belly is empty. While maximizing the amount of protein devoted to muscle building, this schedule also avoids overtaxing the body's ability to process protein by mandating a little digestive break after a main meal.

Bedtime: Avoid eating meals or drinking excessively in the two hours before before bedtime.

Pre-Workout Meals

Do not exercise on a full stomach. Allow at least two hours to digest a main meal before exercising. Consume the recommended small snack fifteen minutes before the workout in order to power your movements without risking indigestion.

Glutamine

Separate glutamine ingestion (first) from protein ingestion by fifteen minutes in order to maximize your abosorbtion of these supplements.

STRETCHES

Ease into each stretch during the first fifteen seconds, and then gradually increase the muscle tension (avoid over-extending the stretch). Ease out of the stretch during the last five seconds.

GENERAL STRETCHES

<u>Lower Back – Static</u>

Hold each position for: 30 seconds pre-workout or 90 seconds post-workout

- 1. Lying down on your back, bring both knees to your chest.
- 2&3. Repeat stretch with just one knee, and then the other.
- 4&5. In the same position, cross one leg over the other bent knee. Repeat for other side.

<u>Arms – Dynamic</u>

Repeat each motion for 15 seconds

1. Shoulder Circles: Holding your arms straight out from your sides while holding 5 lb. weights (like the Perfect Pushup discs), rotate your arms clockwise at larger and larger angles. Repeat in counterclockwise motion.

2. Self-Embrace: Holding your arms straight out from your sides, bring arms forward and cross them at your chest. Then retract arms to starting position, and repeat motion with the opposite arm cross.

<u>Legs – Static</u>

Hold each position for 90 seconds

- 1. Quadriceps: Standing (with a balance aid if necessary), grasp an ankle to raise and pull back the lower leg so that the foot is adjacent to the buttocks. Repeat stretch for other leg.
- 2. Hamstrings: Standing straight, skew one leg forward so that its heel touches an elevated surface at a 45-degree angle. The other leg should be slightly in back of you, foot flush to the ground. Bend over towards the leg extended forward and touch that foot. Repeat stretch for other leg.

<u>Legs – Dynamic</u>

Repeat each motion for 15 seconds. Use support structure for balance.

- 1. Front Kick: Straighten one leg and pendulum swing it forward as high as possible and then slightly back behind you. Repeat for other leg.
- 2. Side Kick (2): Hold out one arm outstretched to your side. Point the near-side foot in that direction and

straight-leg kick at your outstretched hand, and return to the starting position. Following the set, repeat the motion for your other leg. Then repeat the circuit but have your toe facing forward during the motion.

3. Back Kick: Straighten one leg and, leaning your body forward, pendulum swing your straightened leg back as high as possible and then slightly forward in front of you. Repeat for other leg.

<u>Trunk – Dynamic</u>

Repeat each motion for 15 seconds

- 1. Rotations: While sitting, rotate trunk along waist clockwise. Repeat counterclockwise.
- 2. Side Bends: While sitting, bend to one side and then the other, curving your opposite arm outstretched over your head.
- 3. Forward Bends: While sitting, bend forward and then straighten up.
- 4. Back Extensions: Lying face down, push your upper body upward and then lie back down.

<u>Knees – Dynamic</u>

1. Slow Squats: With your back straight, slowly squat up and down for 15 seconds.

STATIC STRETCH THERAPY

Lower Back

1. Shelf Hunch

Standing with legs straight and hunched over with hands outstretched onto shoulder-height surface – 90 sec.

2. Seated Wall Support

Seated with back flush against a wall and legs flat with toes up -90 sec.

3-5. Supine Floor Support

Lying on back with knees bent and legs resting on an elevated surface at a 90-degree angle -10 min.

"" but with one leg flat on the ground with its toes supported upward -5 min. each

6-10. Lower Back Stretches

See "General Stretches" above – 90 sec. each

11. Standing Dog

Standing on your hands and knees with your head

facing forward and back straight, upper legs tilted forward slightly – 90 sec.

12. Pooping Dog

"" but rotate your position to a hunched back -10 reps

Note: This is the one dynamic stretch in this series of otherwise static stretches

13. Upside-Down V

Hands and feet on the ground with the buttocks at the highest altitude, forming 45-degree angle with body -90 sec.

14. Wall-Sitting

Standing with back to wall and knees bent at a 45-degree angle – 3 min.

<u>Legs</u>

15-16. Hips

Seated on chair, legs crossed flush – 90 sec. each

17. Groin

Seated on floor with soles touching, pull joined

feet close to you by grasping your ankles – 90 sec.

18-19. Hamstrings

Standing with one leg resting at a 90-degree angle – 90 sec. each

20. Calves

Position toes on stair step so that your heel stretches downward, with arms outstretched forward onto a support shoulder-height (wearing shoes) – 3 min.

21-22. Quadriceps

Standing on one leg with knee bent back – 90 sec. each

Shoulders

23. Arm Circles

Hands outstretched to the side holding P-pushup weights, rotate arms – 2 sets of 15 small circles, 15 large, 10 small, hold for 10 seconds – 2 more sets in reverse direction

Core

24-25. Standing Balance

On one leg – 90 sec. each

26-30. Core Balancing On Ball

Seated -3 min.

Seated dual-alternate limb raise – 90 sec. each

Superman flying (dual-alternate limb raise on stomach) – 90 sec. each

DAYI	- CHEST		
. —		 	
•			
•		 	
•		 	
•			
•			
•		 	
DAY 2	– BACK		
•		 	
$\frac{1}{2}$	– ARMS	 	
•	– AIMVIS		
•		 	
•		 	
•		 	
•		 	
•			
•		 	
•		 	

DAYI	- CHEST		
. —		 	
•			
•		 	
•		 	
•			
•			
•		 	
DAY 2	– BACK		
•		 	
$\frac{1}{2}$	– ARMS	 	
•	– AIMVIS		
•		 	
•		 	
•		 	
•		 	
•			
•		 	
•		 	

DAYI	- CHEST		
. —		 	
•			
•		 	
•		 	
•			
•			
•		 	
DAY 2	– BACK		
•		 	
$\frac{1}{2}$	– ARMS	 	
•	– AIMVIS		
•		 	
•		 	
•		 	
•		 	
•			
•		 	
•		 	

DAYI	- CHEST		
. —		 	
•			
•		 	
•		 	
•			
•			
•		 	
DAY 2	– BACK		
•		 	
$\frac{1}{2}$	– ARMS	 	
•	– AIMVIS		
•		 	
•		 	
•		 	
•		 	
•			
•		 	
•		 	

DAYI	- CHEST		
. —		 	
•			
•		 	
•		 	
•			
•			
•		 	
DAY 2	– BACK		
•		 	
$\frac{1}{2}$	– ARMS	 	
•	– AIMVIS		
•		 	
•		 	
•		 	
•		 	
•			
•		 	
•		 	

DAYI	- CHEST		
. —		 	
•			
•		 	
•		 	
•			
•			
•		 	
DAY 2	– BACK		
•		 	
$\frac{1}{2}$	– ARMS	 	
•	– AIMVIS		
•		 	
•		 	
•		 	
•		 	
•			
•		 	
•		 	