

NASM Personal Trainer

Exam Study Guide

By Sorta Healthy

(We don't work for NASM)



Steps To Pass Your Exam

1 Skim Chapters: 1, 2, 5, 6, 8, 10, 16, 17, 18, 19, 22, 23
Read Chapters: 3, 4, 7, 9, 11, 12, 13, 14, 15, 20, 21

2 Review this part 1 video, and the
part 2 video a few times each.

3 Review the fitness pocket prep app (link below)

4 Consider buying our trivia study quiz video (link below)

OPT MODEL

CREATED BY NASM





Stabilization Endurance

- Developing proper movement patterns: squat, push, pull, press, hip hinge, and multiplanar movements
 - Correcting muscle imbalances and helping with stabilization
- Promoting client confidence and adherence to exercise

Stabilization Endurance

(Other things to know)

- Sets: 1-3 sets are required for resistance training, core, balance and optional things.
- Reps: 12-20 for resistance, core, and balance exercises (50-70% int.)
- Tempo: 4,2,1,1 for required exercises

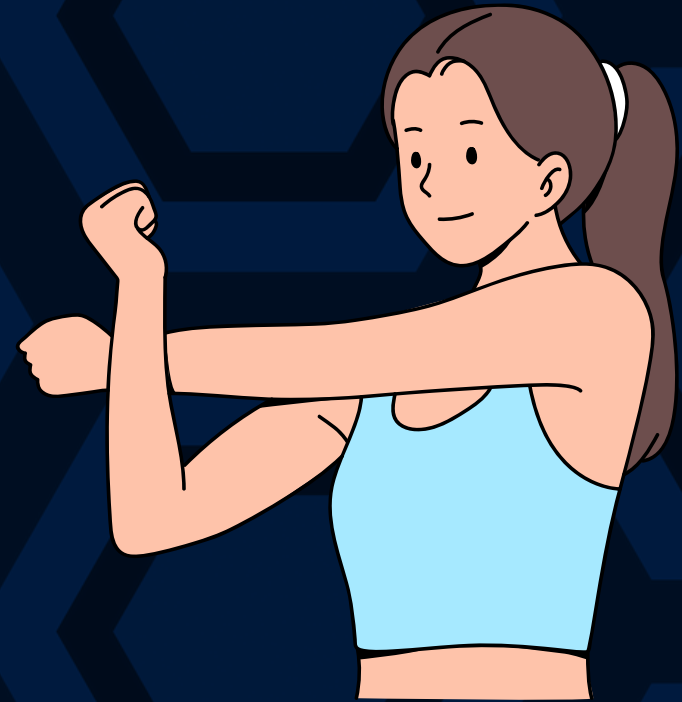


Stabilization Endurance

(Other things to know)

Rest: 0-90's in this phase

- 1-3 sets of SMR and static stretching are required in the warm-up and cool down.
- Static stretching is prominent here to help with muscular imbalances.



Strength Endurance



- Strength move immediately followed by stabilization move with similar motions
- Things can be progressed by increasing proprioceptive demand, volume, intensity or shorter breaks
- First of three strength phases

Strength Endurance

(Other things to know)



Sets: 2-4 for core, balance, resistance training, and some optional things.

Reps: 8-12 for resistance, core, and balance exercises (75-80% int.)

- 2,0,2 tempo for strength exs.**
- 4,2,1,1 tempo for stability exs.**

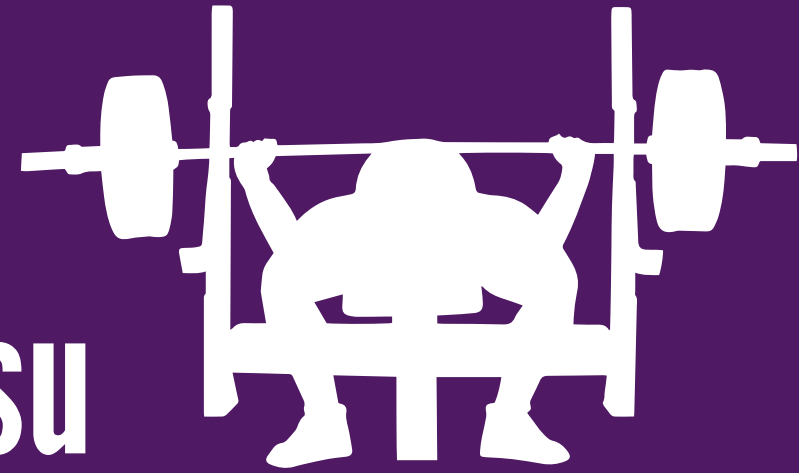
Strength Endurance

(Other things to know)



- Rest: 0-60's in this phase
- Like in all phases, there is still static stretching and SMR in the cool down.
- There is active stretching in the warm-up (1 to 2 sec. hold, 5-10 reps)

**If you have a client bench
pressing and then doing a bosu
push-up right after, what phase of
training are they most likely in?**



A: Strength Endurance



Muscular Development

Sets: 3-6 sets of resistance training

2-4 for core and balance

**Reps: 6-12 for resistance training exercises and
8-12 for core and balance exercises (75-80% int.)**

Tempo: 2,0,2 is used for required moves

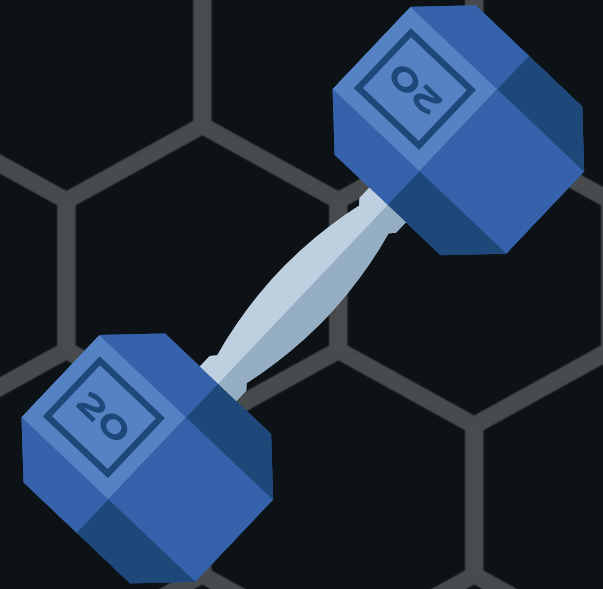
**- There is active stretching in the warm-up (1 to 2
sec. hold, 5-10 reps)**

Muscular Development

(Other things to know)

- 0-3 mins rest for resistance training

- 0-60's rest for core, balance, plyo's, (Optional) SAQ's (optional)



Muscular Development

(Other things to know)

- 12-20 reps is allowed for muscular development if more muscular endurance is desired**
- Rest is up to 3 mins for resistance training because that's how long it takes to recover close to 100% ATP**

Maximal Strength



- This is an optional phase of the OPT model
- This is an advanced form of training and only recommended for experienced lifters and exercisers who have worked their way up to this phase of the model.



Maximal Strength

(Other things to know)

Sets: 4-6 for resistance training moves and 2-4 for core and balance

Reps: 1-5 for resistance training (85-100% int.) and 8-12 for core and balance

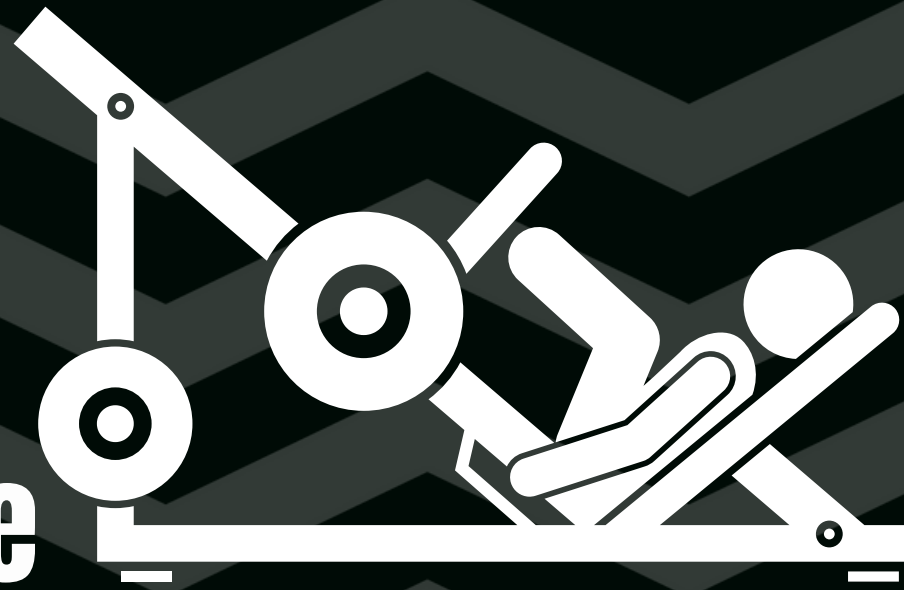
Tempo: Explosive or as fast as possible with good form

Maximal Strength

(Other things to know)

**Rest: 2-4 mins for resistance
training 0-60's for core, balance**

**- Greater than six sets
resistance training sets for
advanced clients is ok**



Power Training



- **Superset strength focused move (heavy 1-5 reps) with a power focused move (lighter 8-10 reps)**
 - **The goal in this phase is to improve a clients strength and their explosive speed/force.**

Power Training

(Other things to know)

Sets: 3-5 for resistance training

Reps: 1-5 for resistance training

(85-100%1RM) and 8-10 for power

(30-45%1RM)

Tempo: Explosive or as fast as possible with good form



Power Training

(Other things to know)

**Rest: 1-2 mins between pairs 3-5
mins between circuits**

**- There is dynamic stretching in the
warm-up (only standard in power)**

**- Core and balance moves are
optional in this phase (only in power)**

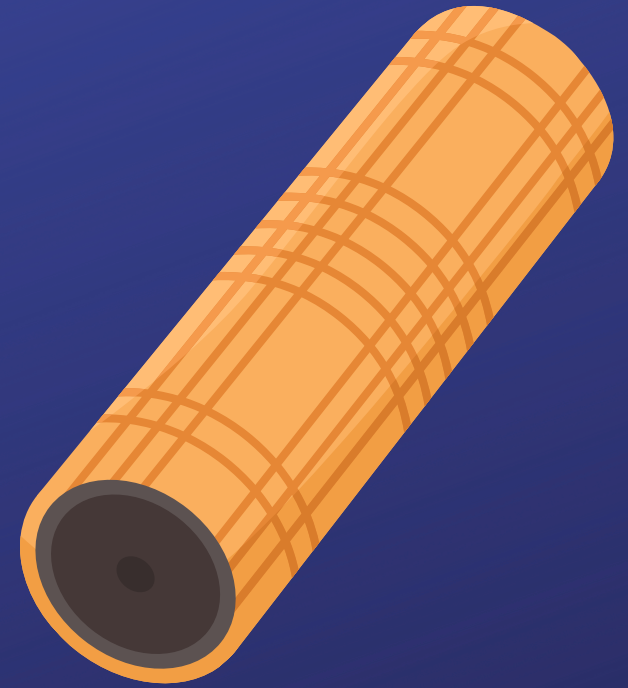
If you have a client doing heavy squats followed by explosive jump squats, what phase are they most likely in?

A: Power Training



OPT Model Patterns

- All warm-up's for phases include SMR for 1-3 body parts (hold 30's on tender areas)
 - All warm-ups include stretching (Static>Active>Dynamic)
 - The cool-downs are the same
- The optional moves (SAQ's, plyos, core, etc. follow a predictable path (see next pages for examples)



CORE PROGRESSION

5

Power

4

Maximal Strength

3

Muscular Development

2

Strength Endurance

1

Stabilization Endurance

IMPROVE THE RATE OF FORCE
PRODUCTION/POWER

↳ (MED BALL ROT THROW)

□ ————— □
ECCENTRIC AND CONCENTRIC

MOVEMENTS OF THE SPINE

↳ (CRUNCH, CABLE ROT.)

□ ————— □
LITTLE TO NO MOVEMENT OF

↳ THE SPINE (PLANK, BRIDGE)

BALANCE PROGRESSION

5

Power

HOPPING MOVES

4

Maximal Strength

SINGLE-LEG SQUAT

3

Muscular Development

MULTIPLANAR LUNGE TO BALANCE

2

Strength Endurance

TANDEM STANCE

1

Stabilization Endurance

SINGLE-LEG BALANCE

SINGLE-LEG CHOP + LIFT

PROPRIOCEPTIVELY CHALLENGING SCALE

**Less
Challenging**

**More
Challenging**



Floor

Balance Beam

Half Foam Roll

Foam Pad

Balance Disc

Wobble Board

Bosu Ball

ALSO...

BILATERAL STABLE > UNILATERAL STABLE > BILATERAL UNSTABLE > UNILATERAL UNSTABLE



PLYOMETRICS

PROGRESSION

5

Power



ICE SKATERS

4

Maximal Strength

DEPTH JUMP



3

Muscular Development

SQUAT JUMP



POWER STEP-UP

2

Strength Endurance



1

Stabilization Endurance



SQUAT JUMP WITH 3-5 SEC HOLD

BOX JUMP-UP WITH STABILIZATION

SAQ PROGRESSION

5

Power

4

Maximal Strength

3

Muscular Development

2

Strength Endurance

1

Stabilization Endurance

MAX HORIZONTAL INERTIA
AND UNPREDICTABILITY
□ — □
INC. HORIZONTAL INERTIA
LIMITED UNPREDICTABILITY
□ — □
LIMITED HORIZONTAL INERTIA
AND UNPREDICTABILITY

STRETCHING PROGRESSION

5
4
3
2
1

Power

Maximal Strength

Muscular Development

Strength Endurance

Stabilization Endurance

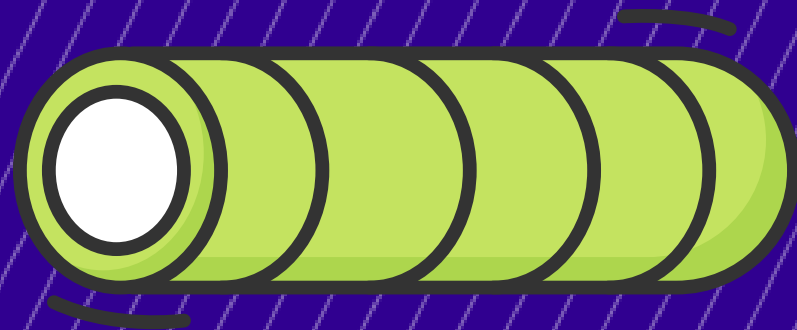
FUNCTIONAL/DYNAMIC

10-15 REPS 3-10 EXERCISES
(LEG SWINGS, ARM CIRC.)

ACTIVE ISOLATED
(1-2 SEC. HOLD 5-10 REPS)

CORRECTIVE/STATIC
(30 SEC HOLD 1-3 SETS)

**Avoid foam rolling with clients who have:
cancer, osteoporosis, recent surgery,
bleeding disorders, uncontrolled
hypertension, open wounds, etc.**



The moral of the story here is that memorizing all of the parts of the OPT model isn't necessary. Memorize some of the key bits we went over. Review the tables listed (Ex. 21-14). Learn the patterns, and be ready to answer multiple choice questions.



OPT Options



OPT model for body fat reduction: phases 1,2,3

OPT model for increasing lean mass:

phases 1 (initially) then cycle > 2,3,4

OPT model for sports performance: phases 1,2,5

FREQUENCY

INTENSITY

TIME

TYPE

ENJOYMENT

VOLUME

PROGRESSION



GENERAL AEROBIC ACTIVITY RECOMMENDATIONS

**PEOPLE SHOULD GET 150 MINUTES OF MODERATE INTENSITY
CARDIO FIVE DAYS A WEEK.**

**OR THEY SHOULD GET 75 MINUTES OF VIGOROUS INTENSITY
CARDIO THREE DAYS A WEEK.**



Periodization- A systematic planning of physical training. The aim is to reach the best possible performance for a specific time frame or event. You achieve this by changing up exercise variables when appropriate.

July						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

**Microcycle: A week long block
of training**

**Mesocycle: A month long block of
training (OPT phases 4-6 weeks)**

**Macrocycle: A year long block
of training**



Linear Periodization

A traditional method of program design that aims to gradually increase the intensity of the training load while simultaneously decreasing volume over a set period of time.



Undulating Periodization

A programming scheme, also known as nonlinear periodization, that uses changes in volume, intensity, and exercise selection to provide loading differences on a daily or weekly basis.



Over Training

Excessive frequency, volume, or intensity of training, resulting in reduction of performance, which is also caused by a lack of proper rest and recovery.



Energy Systems





ATP or Adenosine Triphosphate
molecules provide the body with
energy. Breaking these ATP molecules
down is how your body powers itself.

Try to understand the chart
on the next page.