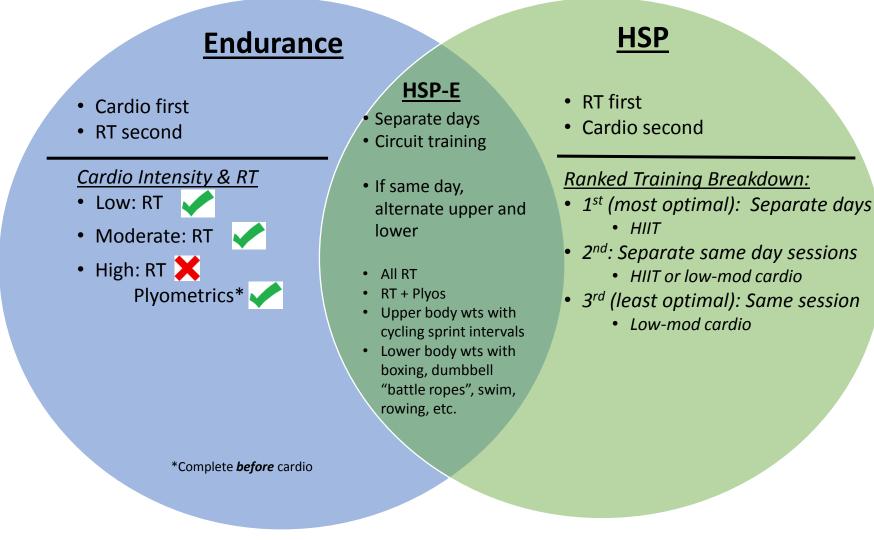
# Cardio and Resistance Training: Performance



HSP: Hypertrophy, Strength and/or Power

E: Endurance or Strength-Endurance

RT: Resistance Training (body weight, bands, free weights, machines, etc.)

HIIT: High Intensity Interval Training (i.e., alternating high-intensity and low-intensity or high-intensity and rest)

## How to Determine RT Workload?

Training Goal	Load (%1RM)	Goal Sets	<b>Goal Repetitions</b>
Strength	<u>&gt;</u> 85	2-6	<u>&lt;</u> 6
Power Single-effort Multiple-effort	80-90 75-85	3-5 3-5	1-2 3-5
Hypertrophy	67-85	3-6	6-12
Endurance	<u>&lt;</u> 67	2-3	<u>&gt; 12</u>

%1RM	# of repetitions allowed	
100	1	
95	2	
93	3	
90	4	
87	5	
85	6	
83	7	
80	8	
77	9	
75	10	
70	11	
67	12	
65	15	

Source: NSCA's Strength Training and Conditioning 4<sup>th</sup> ed., Chapter 17

## Cardio and Resistance Training: Weight Management

Maintenance

• RT: 2-3x/wk

• Cardio: 2-3x/wk

• Alternate upper-

and lower-body

## Weight Loss Goal: Lose fat mass,

Preserve LBM

### <u>**Ultimately**</u>: personal preference

- Separate days or sessions most optimal
- Same day: see Performance sheet

\*\*\*Caloric intake versus energy expenditure will be the driving forces.\*\*\*

#### **Adherence**

- Enjoyment (e.g., intrinsic motivation)
- Social support
- Relapse prevention (planning, accountability)

## LBM\* Gain

## Goal: Gain LBM,

Minimize fat mass gain

### • RT first

- Heavy resistance
  - *Strength*: 2-6 sets, <u><</u>6 reps
  - *Hypertrophy*: 3-6 sets, 6-12 reps
- Cardio second

#### Ranked Training Breakdown:

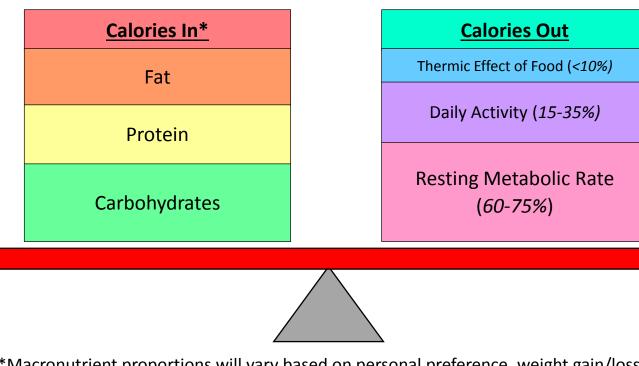
- 1<sup>st</sup> (most optimal): Separate days
  HIIT
- 2<sup>nd</sup>: Separate same day sessions
  - HIIT or low-mod cardio
- 3<sup>rd</sup> (least optimal): Same session
  - Low-mod cardio

RT: Resistance training

LBM: Lean body mass (body weight, bands, free weights, machines, etc.)

HIIT: High Intensity Interval Training (i.e., alternating high-intensity and low-intensity or high-intensity and rest)

## **Energy Expenditure Balance**

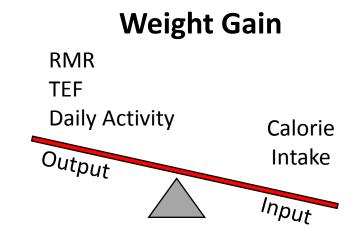


\*Macronutrient proportions will vary based on personal preference, weight gain/loss or fitness goal, health status, exercise selection, etc.

Typically: 45-65% carbohydrate, 10-35% protein, and 20-35% fat.

**<u>Resting metabolic rate (RMR)</u>**: The amount of energy burned (or number of calories burned) that your body uses to carry out bodily processes for function while at rest (*think metabolism*)

<u>Thermic Effect of Food</u>: The amount of energy or number of calories required to break down food substances



## Weight Maintenance

