

Date 8/6/18

Workout Type
Treadmill





Active Metabolic Assessment **

A scientifically accurate method of determining your specific heart rate zones, how your body burns carbohydrates and fats as fuel, and how you can exercise smarter, not harder.



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Heart Rate Zones

Let's see what your zones are.

The following heart rate zone chart is specific to you. This assessment measures 5 heart rate zones specific to your unique metabolism.

	₩	E	C	٨
ZONE 5	183–193 beats per min.	20.8 Calories per min.	- mph	incline
ZONE 4	173–182 beats per min.	18.1 Calories per min.	9.5 mph	1% incline
THRESHOLD	173 beats per min.			
ZONE 3	164–172 beats per min.	15.4 Calories per min.	8.7	1% incline
ZONE 2	155–163 beats per min.	13.7 Calories per min.	7.5 mph	1% incline
BASE	155 beats per min.			
ZONE 1	137–154 beats per min.	11.3 Calories per min.	6.7 mph	1% incline



How Do You Use Your Zones?

You want to balance work and recovery. Ideally all zones should be used each week.

ZONES 1-2

- Burns the most fat
- Should be 80% of your cardio

ZONES 3-5

- Improves cardio strength
- Should be 20% of your cardio

Will Your Zones Change?

Your body will adapt and your zones will change. It will be important to retest to avoid plateaus.

ZONES 1-2

You will notice that you are able to exercise longer at a lower heart rate.

ZONES 3-5

You will notice your heart rate lowers more quickly or doesn't rise as high during hard work.



Heart Rate Zones



Zone 1

Promotes fat-burning and aids in recovery from days of more intense exercise.

FEELS LIKE:

Easy peasy. You could do this for hours.

GOOD FOR:

- Burning Fat
- Recovery Workouts



Base

Your aerobic base is the heart rate at which your body most efficiently burns fat.

GOOD FOR:

- Burning Fat
- Endurance Training
- Recovery Workouts



Zone 2

Trains your body to burn fat efficiently and improve endurance.

FEELS LIKE:

Your breathing is heavier, but you're fairly comfortable.

GOOD FOR:

- Burning Fat
- Endurance



Zone 3

Increases your tolerance for anaerobic training. Improves anaerobic threshold.

FEELS LIKE:

Your breathing is heavy and you're working hard.

GOOD FOR:

- Burning Fat
- Cardio Training
- Exercise Tolerance



Threshold

The point at which your body shifts from burning mostly fat to mostly carbs.

GOOD FOR:

- Interval Training
- Circuit-Style Resistance
- Training



Zone 4

Increases your peak VO₂ and anaerobic threshold.

FEELS LIKE:

You feel winded and you're pushing yourself very hard.

GOOD FOR:

- Cardio Training
- Speed Training



Zone 5

Increases your peak VO₂ and anaerobic threshold.

FEELS LIKE:

You can barely catch your breath. You're at your body's absolute max.

GOOD FOR:

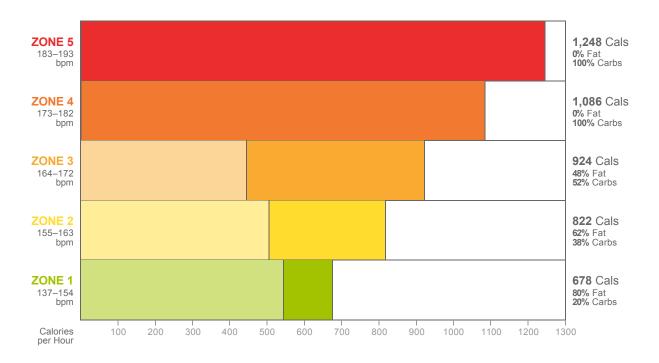
- Sprinting
- Tabata or H.I.I.T.



Fat & Carb Burn

The percentage of Fat and Carbs you burn in each zone is key.

When your heart rate goes up, you burn more and more Calories, but fewer and fewer Calories *from fat*. One of the keys to successful health and weight loss is finding the sweet spot where your body burns the most Calories from fat.





How Do You Use This Information?

You want to balance work and recovery. Ideally all zones should be used each week.

ZONES 1-2

- Should be 80% of your cardio
- Longer workouts in these zones (30-60+ min.)
- Too much can cause staleness and plateaus

ZONES 3-5

- Should be 20% of your cardio
- Shorter workouts consisting of interval training within these zones after warm-up

How Do You Increase Your Fat Burn?

As you use your zones, you can increase the amount of fat you burn.

NUTRITION

We tend to burn more of what we eat, so reducing carbohydrate intake and getting adequate healthy fats can help increase fat burn during exercise.

RECOVERY

Allow yourself recovery time after days of intense exercise. Exercise smarter, not harder



Fat & Carb Burn



Your Body's Stored Calories

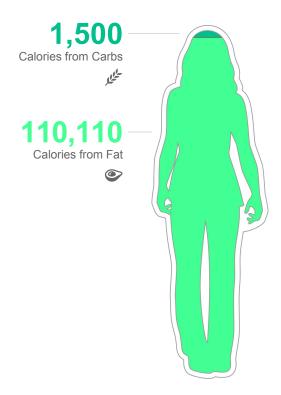
The chart at right illustrates the fuel stored in your body. Think of it as the gas tank that supplies the engine — your body — with fuel. Fat and carbohydrates are what fill your tank.

BODIES HAVE MORE FAT

Within your body, fat stores are considerably larger than carbohydrate stores.

FAT HAS MORE ENERGY

Breaking down 1 unit of fat yields 9 times more energy than breaking down 1 unit of stored carbohydrate.



VO₂ Score

The standard measure of cardiovascular fitness potential.

 ${
m VO}_2$ stands for "Volume of Oxygen." Your ${
m VO}_2$ Score is the maximum amount of oxygen your body is capable of using at any one time. The more in shape you become, the more oxygen your body will be able to use, and the longer and harder you'll be able to work out.

YOUR VO2 IS **60.7**

VERY POOR	POOR	FAIR	GOOD	GREAT	OPTIMAL
<22.8	22.8–26.9	27.0–31.4	31.5–35.6	35.7–40.0	>40.0

(Range for a 39-year-old female)

Comparison of Females by Age

	VERY POOR	POOR	FAIR	GOOD	GREAT	OPTIMAL
13–19	<25.0	25.0–30.9	31.0–34.9	35.0–38.9	39.0–41.9	>41.9
20–29	<23.6	23.6–28.9	29.0–32.9	33.0–36.9	37.0–41.0	>41.0
30–39	<22.8	22.8–26.9	27.0–31.4	31.5–35.6	35.7–40.0	>40.0
40–49	<20.9	21.0–24.3	24.5–28.8	29.0–32.7	32.9–36.8	>36.9
50–59	<20.2	20.2–22.7	22.8–26.9	27.0–31.4	31.5–35.7	>35.7
60+	<17.5	17.5–20.1	20.2–24.4	24.5–30.2	30.3–31.4	>31.4



Improving Your Score

A higher VO_2 score correlates to a decreased/lower risk of cardiovascular diseases.



Warm-Up

Warm-up exercise is very important to your regular workout.

The warm-up below is specific to you. Completing this warm-up prior to most exercise will be important for 3 reasons: One, burn more fat during your workout. Two, lower your risk for injury. Three, it will be easier and more comfortable to sustain higher intensities.

	E	Δ.	₩
2 min.	5.9 mph	1% incline	133 beats per min.
2 min.	6.3 mph	1% incline	143 beats per min.
2 min.	6.7 mph	1% incline	151 beats per min.
2 min.	7.1 mph	1% incline	158 beats per min.
2 min.	7.5 mph	1% incline	163 beats per min.

YOUR TOTAL WARM-UP SHOULD BE 10 min.



How Do You Use Your Warm-Up?

Follow the 2-minute increases in workload until the end of your warm-up while monitoring your heart rate.

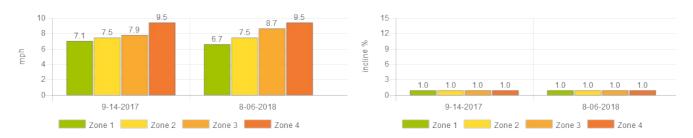
What If Your Warm-Up Changes?

If after 3 consecutive workouts your heart rate is 5 or more beats lower at the end of your warm-up than what is listed above, that is your key to knowing it's time for a reassessment.



Let's see what changed.

Workloads



The maximum intensity you can achieve for each training zone. Ideally the workload for each zone will increase over time, meaning you can achieve a higher intensity for a longer period of time.

HR Zones



Each training zone has a heart rate range associated with it. Heart rate zones do change over time, as your fitness levels change. It is important to regularly re-assess to ensure your heart rate range still correlates with your training goals.

Total Calories Per Minute



The total calories burned by the body, per minute, in a given training zone.



Let's see what changed.

Fat Calories Per Minute



The amount of fat calories burned by the body, per minute, in a given training zone. The more efficient you are at burning fat theoretically the longer you can maintain a given training zone.

Peak VO2 (ml/kg/min)



VO stands for "Volume of Oxygen." Your VO Score is the maximum amount of oxygen your body is capable of using at any on time. The more in shape you become, the more oxygen your body will be able to use, and the longer and harder you'll be able exercise.

Weight and Body Fat %



Tracking your weight and body fat percentage is critical to any fitness goal. Metabolic Testing can help you change or maintain these measurements based on your fitness goals.



What's Next?

What is your goal?	
Why are you committed to achieving this?	
What time commitment can you make each week?	Each day?
What types of exercise do you enjoy?	



Healthy Way of Life Tips



MOVEMENT

10,000 Steps

Equivalent to 5 miles of movement throughout the day.

WHY? Depending on your height and weight, 10,000 steps per day can burn between 300 and 500 Calories.

Rule of Thirds

Do some form of movement during each third (6 hours) of the day.

WHY? Your metabolism powers down if you stop moving for too long. Moving wakes it up.



NUTRITION

Half a Fist of Carbs & Starches

Limit carbs and starchy veggies to 1/2-cup servings at meals (half the size of your fist).

WHY? Reducing carbs will help blood sugar control, cholesterol levels, and daily energy.

Berries Are Best

Limit fruit to 1 to 2 servings daily, preferably berries.

WHY? Fruits other than berries tend to have a high sugar content, and berries are a great source of antioxidants and fiber.

Half Your Weight in Water

Consume at least one-half your body weight in ounces of water daily. A 150-pound person should drink 75 ounces of water a day.

WHY? Staying hydrated enhances metabolism and decreases daytime fatique.

Lean Protein at Each Meal

Eat protein with each meal.

WHY? Protein is needed to maintain and build muscles.

Unlimited Veggies!

Fill half your plate at each meal with non-starchy vegetables.

WHY? Veggies are low-calorie, high-fiber and nutrientrich. The antioxidants and phytochemicals they contain may reduce your risk for cancer and inflammation.

Can't Say It? Don't Eat It

Reduce or eliminate processed foods.

WHY? You'll decrease your exposure to preservatives, artificial ingredients, and toxins that could interrupt your endocrine function or your metabolism.

Don't Overdo It

Stop eating when you feel 80% full.

WHY? It takes time for your stomach to signal your brain that you're full, so if you stop eating when you're 80% full, you'll feel full soon after you stop eating.



zz SLEEP

8 Hours a Night

Sleep is the body's chance to recover and repair.

WHY? Your body will be able to readily adapt to the changes you're creating by exercising when it is fully rested.

Get on a Schedule

A standard bedtime routine helps increase melatonin. Improve your bedtime routine by limiting light and decreasing exposure to electronics like tablets and computers.

89 MOOD & STRESS

Lower Stress, Lower Cortisol

It's easier said than done, but try to be conscious of the areas in your life that cause stress, and reduce or eliminate what you can. Meditation, yoga, or quiet time can help, too.

WHY? If you can address your main areas of stress, it will help lower your cortisol levels. Elevated cortisol contributes to inflammation, aging, and other issues.

Smile, Laugh & Hug

They're good for you. And they're fun, too.

WHY? Smiling lowers your blood pressure and boosts your immune system. Laughing and hugs release oxytocin, a hormone that can counteract cortisol, calm your body, and even reduce food cravings.

Additional Resources That Can Help You

FITNESS TECHNOLOGY

- Heart Rate Monitor
- Activity Monitor
- Sleep Monitor

ASSESSMENTS

- Resting Metabolic Assessment^{sм}
- Lab Assessments

1-ON-1 COACHING

- Metabolic Coaching
- Nutrition Coaching

A REASSESSMENT is key to achieving continued results. As you begin to implement your nutrition and exercise plans, you will notice things might feel different when you exercise. You might not be able to reach the heart rates in your zones, or the way you feel in each zone may be different than how you felt before. Or you may notice that you can do more work in each zone than previously. When this happens, it's time to reassess because your zones and other key markers may have changed. This will also change your Action Plan.

