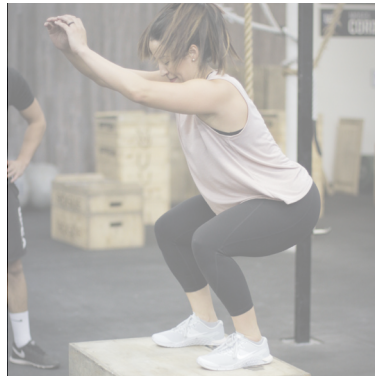
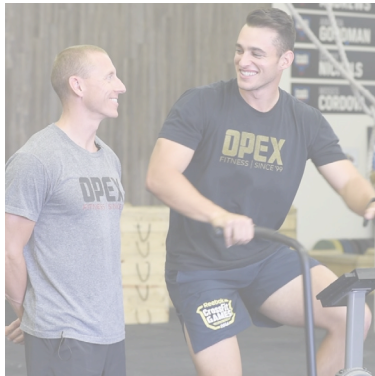




# INTERVAL TRAINING

PROGRAM DESIGN

**OPEX**



# Introduction

Interval training may make your clients work hard and sweat, but are those HITT sessions getting the results you both want?

It's common to fall into the trap of programming tough interval workouts, but we often fail to consider if they're the best way to improve our clients' aerobic capacity, body composition, and longevity.

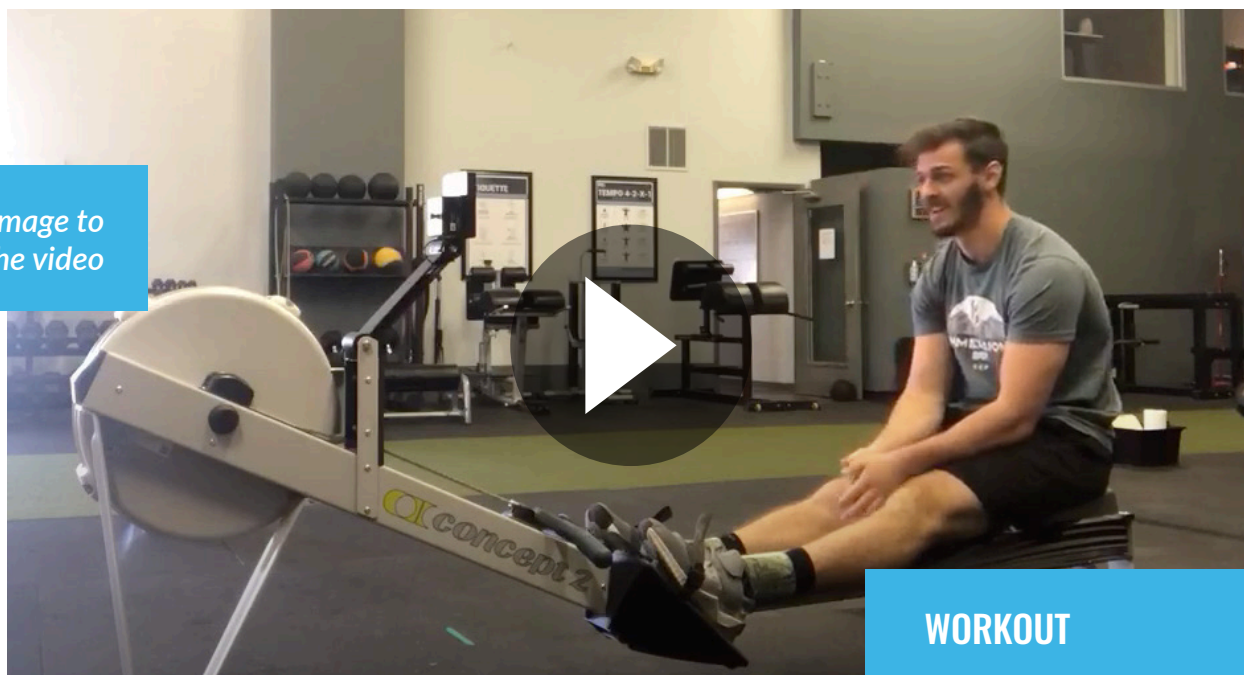
You can avoid ineffective hard work by learning from common interval training mistakes. Best of all, with key program design principles and effective communication, you'll avoid making them with your clients.

From mixed modal to cyclical to bodyweight-only intervals, this guide will show you how to write and coach safe, personalized, and effective functional conditioning workouts.

Read on and watch the accompanying videos to help your clients work smarter, enjoy exercising, and get better results from their interval training.

# Mistake #1: Incorrect Pacing Strategy and Unsustainability

Click the image to watch the video



## WORKOUT

- ▶ 10 sets
- ▶ 30 second [Row](#)
- ▶ Rest 30 seconds

In the video above, Dan demonstrates our first mistake when executing interval training: incorrect pacing strategy and unsustainability. His power output on the first interval is too high and he is unable to recover, with power output decreasing across each interval.

This is problematic because **by making the work unsustainable, Dan is no longer biasing his aerobic energy system**, and is instead relying on the anaerobic lactic energy system. Rather than improving his aerobic capacity, he is teaching his body how to use glycogen for fuel.

High-intensity anaerobic training can drive short-term adaptations and can be performed safely if dosed and progressed appropriately. However, in the long run, it can also lead to overtraining, metabolic compensation, an increase in body fat, and difficulty gaining lean mass.

In comparison to Dan, Mischa demonstrates the appropriate execution of this interval training workout. She successfully maintains **sustainable power output** across all 10 sets. The dose-response of her workout is aerobic and she will experience the **benefits of aerobic fitness, including improved cardiovascular health, the efficiency of respiration, and reduced risk of metabolic disease.**

## PROGRAM DESIGN FIX:

While it can be challenging to teach clients who love to train hard to slow down, it is possible to help them learn to be sustainable with smart program design.

First and foremost, be sure to **communicate the intention** of the interval training session. For aerobic interval training, this means being clear that the goal of the session is to maintain a consistent pace across all intervals, relative to the duration of the work and rest periods.

Second, guarantee consistency by using **intersets repeatability**. Ask your client to record their score for each interval (in this case, total meters), and define success by their ability to demonstrate consistent numbers.

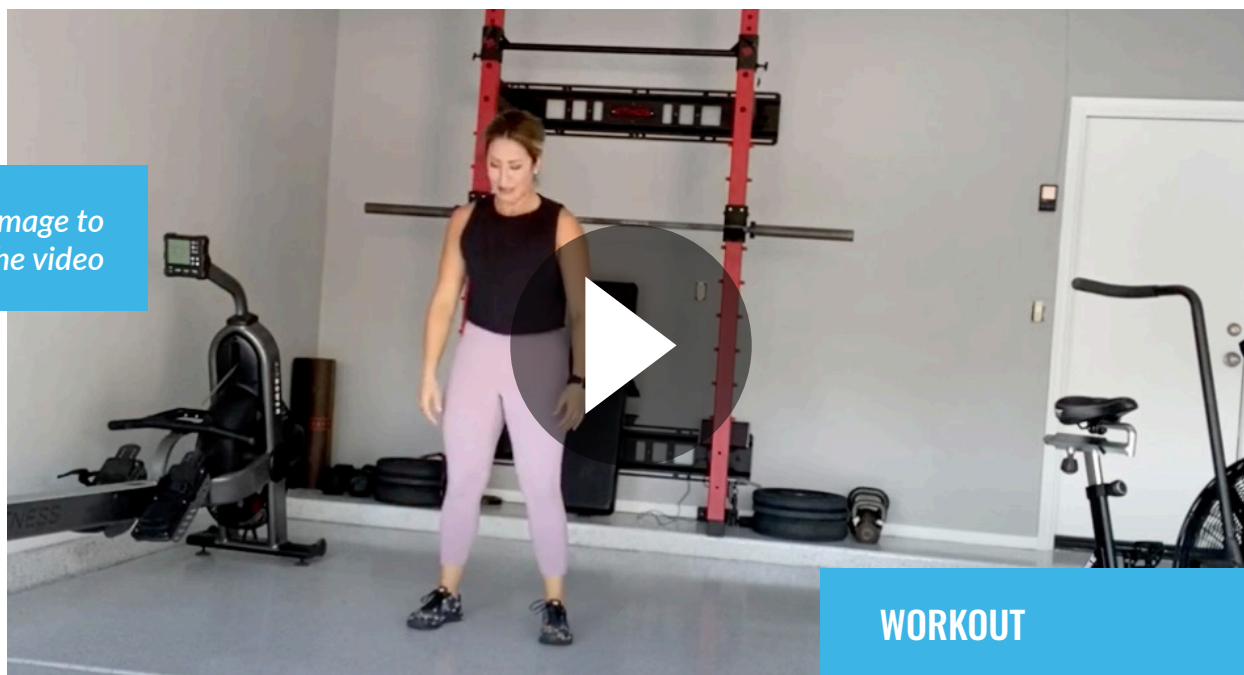
Thirdly, **personalize your communication** and the effort based on each client's essence. If your client is incredibly powerful and tends to redline easily, suggest a 75% pace. In comparison, a weaker and more enduring client may achieve sustainability with an 85% pace. Developing a consistent and deliberate language will help your clients develop a keen awareness of pacing over time.

### UPGRADED WORKOUT FOR DAN:

- ▶ 10 sets @ sustainable pace (75% effort)
  - ▶ 30 second [Row](#) for meters
  - ▶ Rest 30 seconds
- (Note meters per set and keep the number consistent across all 10 sets)*

## Mistake #2: Muscle Endurance as the Limiter

Click the image to watch the video



### WORKOUT

- ▶ 8 sets @ sustainable pace
- ▶ 30 seconds of [Push-Ups](#)
- ▶ 30 seconds of [Jump Lunges](#)
- ▶ 30 seconds of [Burpees](#)
- ▶ Rest 90 seconds

In the video above, Janice demonstrates our second common interval training mistake: muscle endurance as the limiter. Janice is **unable to move consistently throughout the entire interval and has to break up each exercise as she approaches mechanical failure**. As a result, muscle fatigue prevents her from experiencing the desired aerobic dose-response.

In comparison, Carl is not limited by muscle endurance fatigue and can move consistently throughout the entire interval. Instead, **the limitation is metabolic, as he moves at a pace which ensures he kept the effort aerobic**.

## PROGRAM DESIGN FIX:

Muscle endurance as the limiter can be avoided by personalizing the exercises and rep schemes you select.

To do this, you must always start with an assessment. This will help you identify your client's current capabilities and their level of muscle endurance across different movement patterns. ([See an OPEX assessment in action in this free course.](#))

For example, if your client can perform a max set of 50 push-ups, then you can safely assume that you can program 30 seconds of push-ups and burpees (a plyometric push-up) in aerobic intervals.

If they can only perform 5 push-ups, then a more appropriate exercise selection may be elevated push-ups and no push-up burpees.

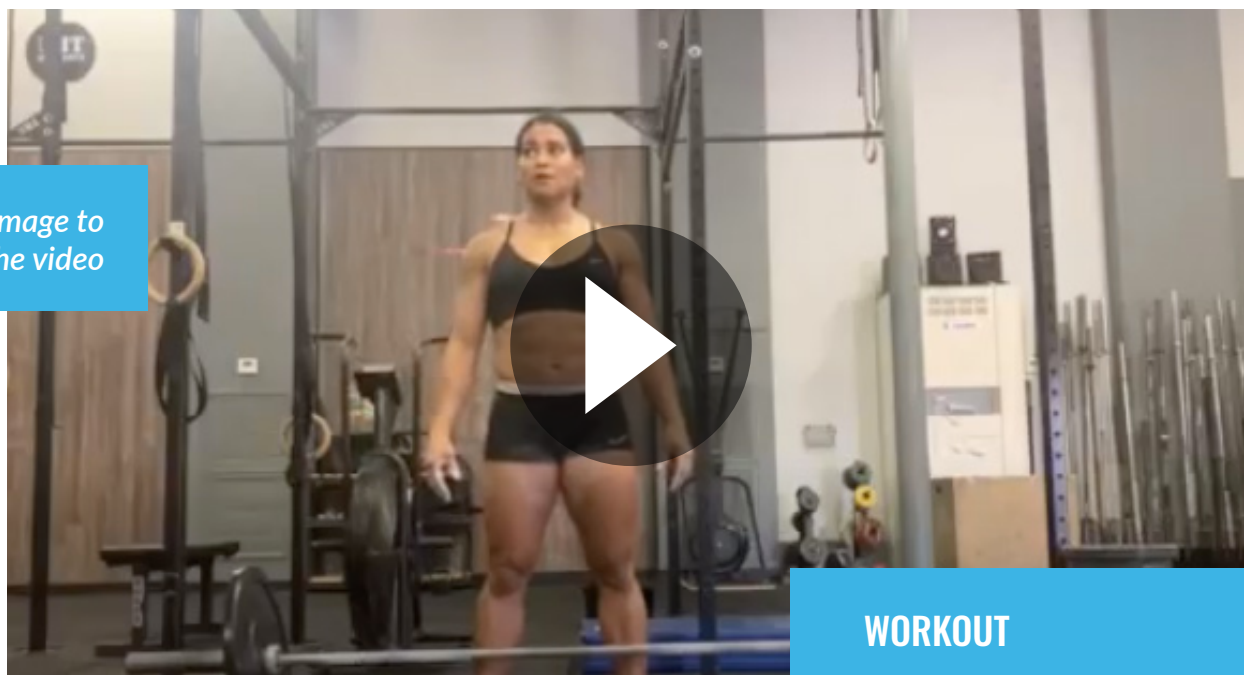
### UPGRADED WORKOUT FOR JANICE:

- ▶ 8 sets @ sustainable pace
- ▶ 30 seconds of Elevated [Push-Ups](#)
- ▶ 30 seconds of [Walking Lunges](#)
- ▶ 30 seconds of [No Push-Up Burpees](#)
- ▶ Rest 90 seconds

*(Perform each exercise at a consistent pace across each 30-second block. Pick elevation on push-ups to allow this.)*

## Mistake #3: Incorrect Exercise Selection for Mixed Modal Intervals

Click the image to watch the video



### WORKOUT

- ▶ 6 sets @ sustainable pace
- ▶ 2:00 Minute Clock
- ▶ 5 [Front Squats](#) @ 155lb
- ▶ 8 [Strict Chest to Bar Pull-Ups](#)
- ▶ In the remaining time, Single Unders for reps
- ▶ Rest 2:00 minutes

In the video above, Amanda demonstrates two mixed modal interval training workouts to highlight our final interval training mistake: incorrect exercise selection.

In the first workout, the exercises selected are inappropriate for Amanda to achieve an aerobic dose-response at the pace required for a 2-minute interval.

The **power output required for each exercise is not high enough to create the metabolic fatigue necessary to challenge Amanda's aerobic system.** This is because the intensity (the load) of the front squat and the strict pull-up is too high and the rate of contraction (the speed) is too low.

The single unders are also a poor exercise selection, as they are too easy a contraction for Amanda in the context of a 2-minute aerobic power interval.

## PROGRAM DESIGN FIX:

Selecting exercises that can be performed with a higher power output relative to Amanda's capabilities will ensure that her mixed modal intervals support her goals of improving her aerobic power.

In the upgraded workout for Amanda, the exercises selected are at an intensity and can be performed at a **rate of contraction that creates an appropriate power output**. Both the thrusters and the toes to bar are lower in intensity than the heavy front squats and strict pull-ups, but create a larger metabolic challenge because of the faster rate of contraction. The Assault Bike also requires a higher power output than the single unders in her first workout.

### UPGRADED WORKOUT FOR AMANDA

- ▶ 6 sets @ sustainable pace
- ▶ 2:00 Minute Clock
- ▶ 10 [Thrusters](#) @ 65lb
- ▶ 10 [Toes to Bar](#)
- ▶ In the remaining time, [Assault Bike](#) for calories
- ▶ Rest 2:00 minutes

The appropriate exercise selection allows Amanda to find the perfect **balance of “too hard” and “too easy.”** She can maintain consistency across all intervals while challenging her aerobic system with the appropriate power output.



# Personalized Interval Training for Any Client, Anywhere

Each of these examples demonstrates one key fault and fix that you can implement in your interval workouts today.

However, the best way to avoid program design mistakes is to have a foundation of proven exercise principles and a method to personalize every workout you write.

To help every client reach their goals, you need to know how to create the desired training response, and this becomes even more complex when you combine strength and conditioning.

Your ability to personalize training will remove the guesswork from coaching, helping you to write smart exercise programs with confidence and efficiency.

Take the next step, and sign up for our free coaching course, [The Coach's Toolkit](#), to learn the tools of personalization and get the skills you need to train any client, anywhere.

**SIGN UP**

**OPEX**