



Integrated Body Conditioning[®]:

The Ultimate Fusion Program

by

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We hear a lot these days about fusion exercise systems. Mind-body programs, a form of fusion, are all the rage. What if there was an exercise system that took every known form of exercise, including mind-body protocols, and fused them into a single workout? What if this exercise system delivered more than twice the training results of the best alternative that could be designed by a group of coaches, trainers, and exercise professionals, as shown through controlled scientific trials with women and men subjects? What if it was safe, easy to learn, eliminated delayed-onset muscle soreness, more fun, and universally scalable? There is such an exercise system: Integrated Body Conditioning®.

This “Miracle Workout” is a form of concurrent exercise – the combination of different modes of training, such as aerobics and weight lifting, into the same exercise program or workout. It differs from other concurrent exercise programs in that the different modes of exercise are “integrated” rather than simply “combined.” In combined programs, aerobics and weight lifting are done on the same or alternate days, but as separate, stand-alone routines. Integrated Body Conditioning® alternates the different modes repeatedly in every workout.

This unique training system was developed for athletes based on fundamental principles of exercise physiology and biology. It was then tested at the University of California, and then popularized for all levels in Boulder, Colorado. It’s ideal for all ages and applications,



from health and wellness, through fitness, to peak athletic performance, and endorsed for training by The American Council on Exercise.

Let's take a closer look at the structure of this Miracle Workout. But let's start first with an even more fundamental question: what is exercise? Exercise is purposeful posture and movement aimed at developing body and mind. As an exercise professional you know very well that different types of exercise address different purposes and goals. Weight (resistance) training is best for strength, muscle endurance, and bone density; aerobics (cardio) is for cardiovascular and cardiopulmonary conditioning; and range-of-motion (ROM) exercise is for joint, ligament, and tendon flexibility. Then there is energy-system training, divided roughly into aerobic and anaerobic, and for athletes, sport-specific variations. Add to that agility, balance, and power training – specialties that are combinations and sub-sets of the broader categories of strength, aerobics, and ROM. And finally, there is mind-body training – cross-over systems that condition the body and mind at the same time, and are typically eastern in origin (martial arts, Tai Chi, yoga, etc.).

Then there is The Miracle Workout -- the ultimate fusion system that incorporates every one of the above types of exercise into every single workout. How is that possible, you say – there's not enough time in the year! *Fact:* you can do The Miracle Workout in as little as 30 minutes, over your lunch break -- or in an hour, if you are a recreational exerciser, or in a



challenging two or three hour workout, if you are a dedicated athlete. The only limits are your level, goals, motivation, and time.

And why should you bother learning how to do and teach Integrated Body Conditioning®?

Because human physiology is designed to develop best and fastest through integrated exercise. Your body is a system of interacting parts, just like a soccer team. A soccer team may have a world-class sweeper, striker, and goalie, but unless they can work together seamlessly, forget it. Championship coaches train not only the parts, but also the interactions between the parts, the whole, the “system.” There’s a word for it: teamwork! Similarly, the success of the “body team” depends not only on the excellence of the parts, but also on their interactions. The Miracle Workout trains both the parts and their interactions. The underlying philosophy is to condition the different parts of the body system in concert, so that each part can help every other develop to its full genetic potential. The whole then becomes greater than the sum of the parts.

Are you ready to give it a try? First make sure it is safe for you to exercise. You’re a trainer, you know the drill: light exercise (50 – 63% of maximum heart rate, estimated as 220 minus age in years) is okay for nearly anyone who can move; moderate exercise (64 – 76% of maximum heart rate) is generally fine for anyone who is asymptomatic; and vigorous exercise (77 – 93% of maximum heart rate) works for anyone who is young, healthy,



asymptomatic, and has no more than one risk factor for coronary artery disease. Otherwise, see your doctor first.

Let's do it. Eat an hour before your workout (low-glycemic carbs), drink a half-hour before (water, or The Miracle Workout Sports Drink; www.MiracleWorkout.com), strap on your heart rate monitor, and go. Start with a prolonged warm-up of 10 – 60 minutes but typically 15 - 20 minutes. We call this initial aerobic session the “Heat-up (Figure 1);” in addition to the usual benefits of the warm-up, the Heat-up “pre-sets” your heart so you can perform the next step – the Cardiolift. When you are finished with your Heat-up, your heart rate will fall back toward rest as you set up your first resistance exercise – say the half-squat on the power rack. Set the bar, load the plates, and apply the collars.

Then start your Cardiolift (Figure 1): *cardioaccelerate* for 30 – 45 seconds with aerobic exercise, until your heart rate approaches the upper region of your heart rate target window. Use the aerobic exercise of your choice – cardio machines, running in place, jumping rope, or – if you are young and athletic – box plyometrics to add strength, balance, and agility training. Once your heart rate is elevated well into your training window, walk to the squat rack and complete your first set. The squat is full-body effort, and your heart rate will stay high, in part because you have pre-set your heart with the Heat-up to delay recovery. Let your heart rate fall back to the lower boundary of your training window before you *cardioaccelerate* for your second set. That will give you the benefit of lactate threshold



conditioning (as in interval training). Cardioaccelerate again, and do your second set of squats, and so on until the end of your first exercise.

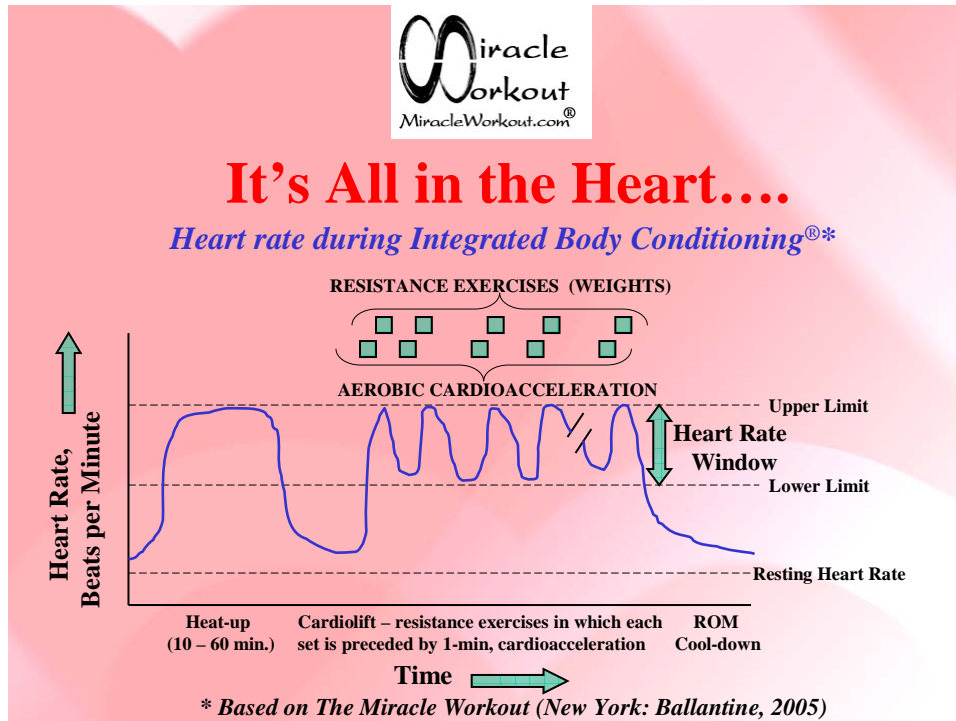


Figure 1: A typical Miracle Workout, showing how heart rate varies. The initial Heat-up is followed by alternating aerobic and resistance exercise, during which heart rate is kept in a prescribed heart rate training window that is specific to each exerciser and depends on goals and physical condition. The Miracle Workout is concluded with a Range-of-Motion (ROM) cool-down. © 2007, The Miracle Workout, LLC.

There's a straight-forward "physio-logic" to integrating cardio and strength training: the *Fast Flush*. In conventional weight training the exercises are anaerobic. They don't require immediate oxygen, and therefore they don't impose an immediate cardiovascular demand. Your heart rate therefore barely budes during conventional resistance training (Figure 2),



and little additional blood perfuses those hard-working muscles. In contrast, when you integrate cardio and strength training in The Miracle Workout, your heart rate is purposefully elevated during lifts (Figure 1). The result is up to five times the cardiac output, up to twice the systolic blood pressure, and therefore up to ten times the feeding and cleaning power of working muscles – the *Fast Flush*. You therefore don't get sore, and your muscles grow faster.

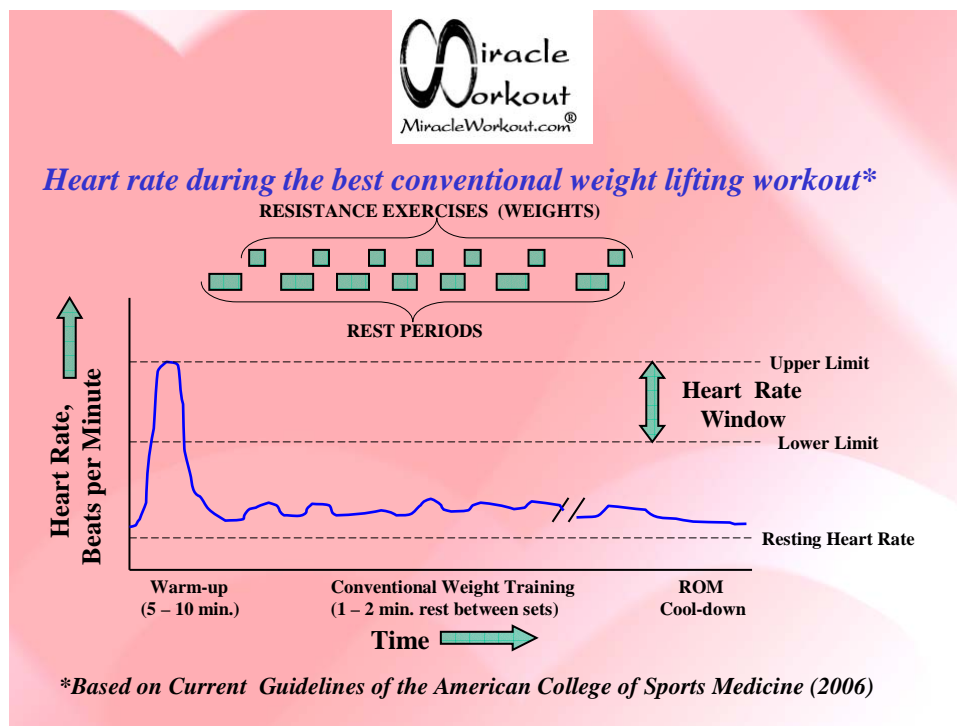


Figure 2: A typical conventional resistance training workout as prescribed by the American College of Sports Medicine, showing how heart rate varies. Heart rate is little changed by the anaerobic exercises, and reaches the window for cardiovascular adaptations only during the brief warm-up.

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Back to your Miracle Workout workout: break down the squat bar, and set up your next exercise, say the inclined leg press. Cardioaccelerate to near the top of your prescribed heart rate training window, do the first set of leg presses; cardioaccelerate again, and lift, and so on until you've completed this exercise. And so on with the next exercise in your protocol, and throughout the remainder of your resistance sequence. When you are finished lifting, cool down with a ROM sequence with no cardioacceleration between exercises.

Depending on the number of exercises (3 – 7) and sets (1 – 6), you'll typically finish your fully-integrated workout in 30 - 90 minutes. You can complete a 15 minute Heat-Up, 3 sets of 5 exercises, and a ROM cool-down in about one hour. I typically use split sessions – core one day, lower body the next, upper the next, although any program will work so long as you follow the basic principles. You can work out every day on this schedule if you have the time and will.

The Miracle Workout presents a significant cardiovascular challenge. You are asking your heart to drive up to five times the usual flow of blood through working muscles at twice the blood pressure, repeatedly. For safety and comfort, most exercisers require systematic preparation in two steps: Cardio, and Cardiorom. The first step, Cardio, is conventional cardiovascular exercise that gets you into adequate cardiovascular and cardiopulmonary condition for the fully-integrated workout. Limit your exercise program initially to incremental, self-paced aerobics for as long as necessary to achieve sufficient cardio



conditioning. You know you are ready when you can exercise in your designated heart rate training window continuously for 30 – 45 minutes in full comfort -- no pain greater than “weak”, no exertion greater than “strong”.

In the second preparatory phase – the Cardiorom – you test and strengthen your joints and tendons to make sure they can bear weight during resistance exercise. You achieve this goal by integrating cardio with ROM exercise for another few workouts. Start with the “Heat-up” -- 15 – 30 minutes of cardio exercise at your criterion intensity (light, moderate, vigorous, based on heart rate). Then cardioaccelerate, stretch; cardioaccelerate, stretch, and so on to the end of your ROM routine. The idea is to stretch and bend at elevated heart rate. You’ll usually know immediately if there are tendon or joint issues, because it will hurt. If so, stop, and find out why before you resume your workouts. When you can complete a Cardiorom session in full comfort, you’re ready for the fully- integrated workout (Figure 1). Most people spend a week each in the Cardio and Cardiorom phases; well-trained athletes can complete each preparatory step in just one workout. We have trained more than a thousand trainers and exercisers in The Miracle Workout, and there has never been an injury ascribable to the workout.

Okay, you say, I get the “*body*” part – integrated cardio, strength, and flexibility exercise – but how about the “*mind*?” It turns out that you can’t perform The Miracle Workout effectively unless your mind and body work together. An example of such mind-body



collaboration, you know that when you're in good cardiovascular condition, aerobic exercise raises your heart rate only slowly and then, when you stop, your heart rate recovers rapidly. And yet, The Miracle Workout requires exactly the opposite -- rapid elevation of heart rate (cardioacceleration) and slow recovery to enable you to complete a lift while your heart rate is still elevated into your heart rate training window. How to resolve this physiological dilemma?

The answer: let your mind and body work together! As a trainer, you know that cardiovascular exercise induces imperceptible cardiovascular fatigue, which in turn enables you to elevate heart rate more quickly, and slows heart rate recovery. In other words, cardiovascular exercise performed before your Cardiolift "pre-sets" your heart so you can get your heart rate up quickly and keep it up while you lift. How do you know exactly when you have induced just enough cardiovascular fatigue, but not so much to prevent lifting with intensity? Experience has shown that you are pre-set perfectly for the Cardiolift when your heart rate following your aerobic Heat-up recovers to 100 beats per minute in 4 – 5 minutes. If your heart rate recovers faster, increase your heart rate window or Heat-up duration, and if it recovers slower, decrease one or both. This process of calibrating your Heat-up is called "Cardio Profiling. Clients get a kick out of creating their Cardio Profile using our purpose-designed form (www.MiracleWorkout.com/form/cardio-profile.pdf) and they learn a lot about their body in the process.



And then there's progression. As an exercise professional, you know you must progress regularly or stagnate. The Miracle Workout uses a unique method of progression that again requires mind-body collaboration. At the end of the last set of each weight lifting exercise, assess your perceived pain and exertion. If pain was less than weak, and exertion less than strong (for most exercisers), add one repetition to your set in the next workout, or increase the weight, whichever is appropriate. If pain was greater than weak, find out why before continuing, and if exertion was greater than strong, simply repeat the same weight and reps in your next workout. Use the purpose-designed workout logs on our website. Note that with this method, you prescribe your next workout during the current workout, creating what psychologists call "stimulus control." Using biofeedback you generate a "stimulus" (a prescribed workout) that elicits a desired "response" (training adaptations) – another classic example of mind-body collaboration in The Miracle Workout.

A final example of the mind-body connection in The Miracle Workout is the Runner's High - - that storied state that some people liken to exercise euphoria. It probably comes from circulating endorphins, which are normally absent during weight training. Thanks to the prolonged heat-up and subsequent cardioacceleration during The Miracle Workout, you can for the first time focus the Runner's High on the development of strength, power, agility, and balance. For those who are able and inclined, every workout can become a mind-body meditation.



The Miracle Workout is unlike any other exercise program you have ever encountered. It is distinct from conventional weight training, for example, which lacks a Heat-up to pre-set heart rate, and in which heart rate is largely unchanged (Figure 2). The Miracle Workout is sometimes confused with circuit training; in reality it is entirely different. Circuit training lacks the pre-set, employs brief rests between lifts, and must employ light weights and high reps in order to drive heart rate effectively. Circuit training cannot therefore grow strength (Figure 3). Only The Miracle Workout generates systematically and repeatedly the Fast Flush, and that's what produces the miracles.



Figure 3: Comparison of The Miracle Workout with two popular conventional exercise programs. Shown are the typical heart rate profiles during conventional weight training (top), circuit training (middle), and The Miracle Workout (bottom). © 2007, The Miracle Workout, LLC.



We offer one-day workshops for certified trainers, endorsed by the American Council on Exercise and others for continuing education, so you can use this proprietary methodology in your business (see the Training page at this website). Certified Trainers in Integrated Body Conditioning® enjoy the opportunity to share in the profits generated by licensing agreements that they establish. We also have a Master Trainer program; Master Trainers are Certified Trainers who have a college degree in a related field, and undertake advanced training so they can present the one-day Miracle Workout on their own, making up to \$1,000 per day. If you are interested, see our website for the next Miracle Workout Workshop, or contact us.

In the meantime, anyone can do The Miracle Workout for personal use. See my book, *The Miracle Workout* (New York: Ballantine, 2005), and this website for details and helpful tools. And keep an eye out in the *Journal of Strength and Conditioning Research* over the next year for peer-reviewed scientific papers that document the extraordinary claims we can make for this exercise system.

Now you see why we call The Miracle Workout the ultimate fusion program. Here's our guarantee: do this workout correctly for four weeks, and you will see faster training adaptations than you have ever recorded previously *and* you'll have more fun. The experience will forever change for you the nature and perception of exercise. And from that point onward there will be no turning back.