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WOMAN VS. MACHINE

DID YOU DITCH MACHINES FOR FREE WEIGHTS AND FUNCTIONAL TRAINING?
IT MAY BE TIME TO GIVE THESE DISCARDED TOOLS ANOTHER CHANCE.

M

achines get no love. Judging by Instagram feeds and equipment-shunning videos, we would rather heave kettlebells, flip tires and burpee until we barf. But here's the thing: While machines may feel like relics from long-ago lifting days, they're actually pretty darn effective when it comes to muscle growth and fat burning.

"I almost always include machines with [those] just starting a resistance program," says Darlene Kalina Salvador, a California-based certified personal trainer and registered yoga teacher. "Machines help clients maintain correct form, learn movement patterns and assist in warming up the stabilizing muscles. People new to training are also less intimidated by machines and are more likely to use them on days when they train on their own."

Machines also can help when it comes to rehabbing an injury. "For things like ACL injuries or runner's knee rehab, you can strengthen the quadriceps muscle far more precisely and safely on a leg extension or leg press machine than you could doing a lunge or a squat," says Dan Roberts, U.K. strength and conditioning coach and founder of The Dan Roberts Group.

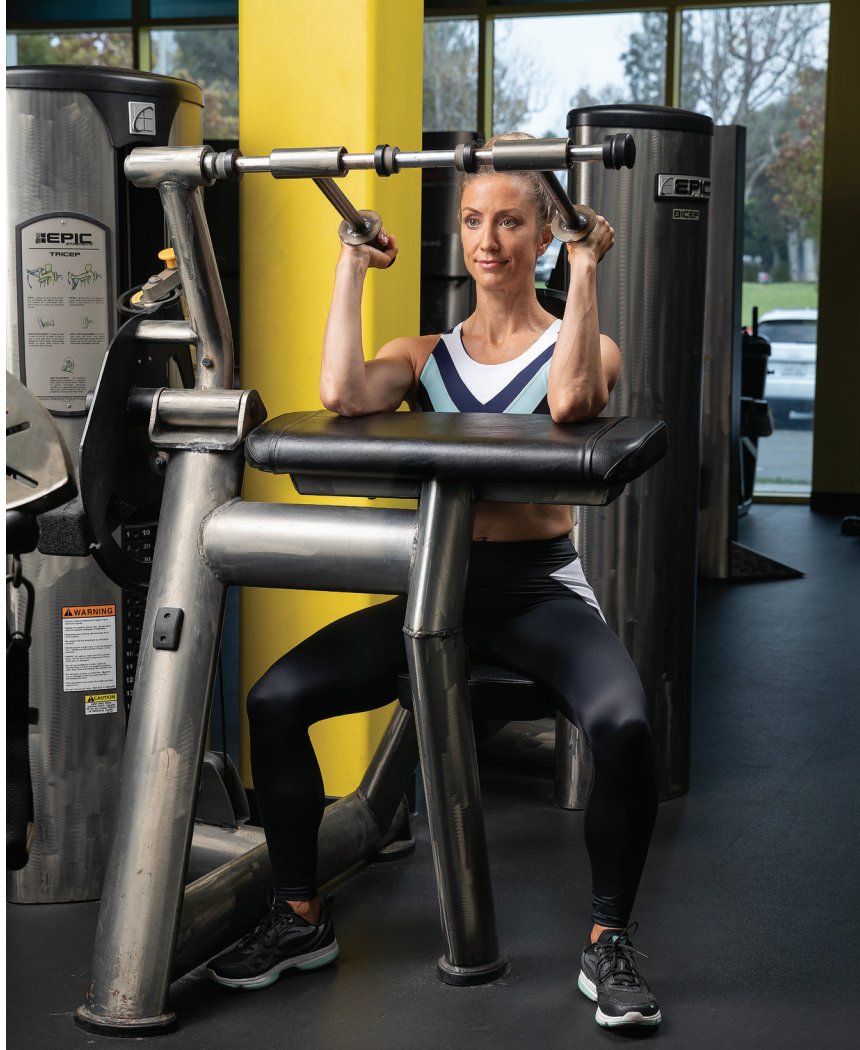
So if you're finally back at your health club, give those rows of gleaming (and newly disinfected!) machines another go. Not sure where to start? Read through our experts' top 10 picks for the most effective machines and their tips on how to use each one like a pro. As an added bonus, they give recommendations for a secondary move to pair with each machine to maximize intensity. Happy machinations!

SHOT ON LOCATION AT BSF FITNESS, VENTURA, CALIFORNIA

TOP 10 COUNTDOWN

MIX AND MATCH

A STUDY PUBLISHED IN THE *JOURNAL OF STRENGTH AND CONDITIONING RESEARCH* FOUND THAT MIXING FREE WEIGHTS WITH MACHINE MOVEMENTS WAS THE BEST WAY TO PROMPT MUSCLE GROWTH.



NO. 10 | SEATED TRICEPS EXTENSION

Dumbbell triceps kickbacks are all fine and good — if you do them properly. This machine takes all the guesswork out of isolating your triceps by stabilizing your upper arms so the only movement occurs at your elbows.

ALWAYS

... position the seat so your entire upper arm, from your elbow to your armpit, rests on the pad. This completely supports your humerus to help maximize isolation.

NEVER

... hyperextend your wrists. Keep them strong and locked in place to prevent injury and maximize power.

MIND-MUSCLE

Picture a metal rod running horizontally through your elbows holding your arms in place.

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Pair this machine with triceps or sphinx push-ups to failure.



NO. 9 | SEATED SHOULDER PRESS

Though there are many free-weight variations of the overhead press, a shoulder press machine can be especially helpful for building the strength (and confidence) to push and hold a load overhead.

ALWAYS

... draw your shoulder blades down and back. "Maintain that tension [throughout] so your shoulder joints and upper-back muscles are fully supported, especially when returning to the start," Salvador says.

NEVER

... hold your breath. "Exhale as you extend your arms up and overhead and inhale as you slowly lower the weight," she says.

MIND-MUSCLE

It may be counterintuitive since it's a shoulder exercise but think about engaging your lats as you lower the weight. This helps stabilize your core and allows you to maintain control on the descent. It also will help keep you upright, focusing the work on your shoulders so your chest doesn't step in to assist.

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Salvador recommends supersetting a seated machine press with a lateral exercise-band shoulder raise to increase your time under tension, effectively building muscle without negative impact to your joints.





NO. 8 | LYING LEG CURL

This is arguably the most challenging of the hamstring-targeting machines — and thus the most beneficial — but you'll need to be extra cognizant of your form to optimize results and prevent injury.

ALWAYS

... adjust the machine properly so your joints are safely supported: Your Achilles tendons should be positioned under the padded lever, and your knees should align with the fulcrum (pivot) point of the machine.

NEVER

... lock out or hyperextend your knees, which are in a particularly vulnerable position as you lower the weight and extend your hamstrings. Keeping that slight bend helps protect you from harm.

MIND-MUSCLE

Think of your hamstrings as the "biceps" of your legs: Imagine them shortening into a ball as you curl the weight up and extending and lengthening as you lower the weight down.

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Grab a pair of light dumbbells and perform alternating reverse lunges.





NO. 7 | REVERSE PEC-DECK FLYE

Not a lot of moves directly target your rear delts, but facing rearward on this double-duty machine wages war on those posterior players.

ALWAYS

... keep your torso in contact with the support pad and maintain a tight core as you rep. This helps focus the work on your rear delts without your arms and momentum taking over.

NEVER

... allow your elbows to drop below parallel with the floor, which shifts the emphasis away from your rear delts and onto your arms.

MIND-MUSCLE

To reduce the engagement of your front and lateral delts, imagine your rear delts are pistons, pulling your humerus backward in a horizontal plane at shoulder level, then slowly releasing pressure to return to the start.

BARN BURNER

Straight-arm dumbbell kickbacks, either done simultaneously or one arm at a time, are a unique way to engage the rear delts if you're bored with the ubiquitous bent-over lateral raise.

"WITH A SEATED CABLE ROW, I RECOMMEND INCORPORATING A 20-DEGREE HIP HINGE FORWARD AND BACK TO MAXIMIZE THE ENGAGEMENT OF THE BACK MUSCLES WITHOUT COMPROMISING SAFETY," DAN ROBERTS SAYS.

NO. 6 | TWO-ARM SEATED CABLE ROW

While seated rows are effective, they're not the easiest to learn. "Watch 100 people do seated rows and you'll probably see 100 variations," Roberts says, jokingly.

ALWAYS

... keep your knees slightly bent to reduce patellar strain, even at full extension, Roberts advises.

NEVER

... allow your lower back to collapse by relaxing your core. If you can't maintain the natural curve in your lower back, reduce the weight.

MIND-MUSCLE

"Think about maintaining a 'long neck' as you rep (as opposed to pulling your chin toward your chest)," Roberts says. "This helps keep your upper traps from taking over the brunt of the movement."

BARN BURNER

After doing your reps on the machine, move immediately to the floor and do a set of resistance-band high rows to failure.



NO. 5 | MACHINE PREACHER CURL

Curls are one of the most satisfying exercises in existence. Here, a machine can be just as effective as free weights for instant muscle-pump gratification.

ALWAYS

... keep your arms and shoulders aligned to completely focus the movement at the elbow where it belongs.

NEVER

... shortchange your reps — and therefore your results. Curl the weight up completely, pause briefly, then extend all the way back down to the pad.

MIND-MUSCLE

To really direct your focus toward your biceps, perform a three-second hold at the top of each rep.

BARN BURNER

Perform resistance-band curls to failure after each set of machine curls as a finisher.



NO. 4 | SEATED CHEST PRESS

A machine chest press provides a safer venue to push heavy weight or perform higher reps without a spotter, and the stack-and-pin system makes performing drop sets and other intensity-boosting techniques easier.

ALWAYS

... protect your wrists. "People have a tendency to roll their wrists back, but that puts you in a bad position and you're more likely to incur an injury such as a strain or a pinched nerve," Salvador says. "Keep them neutral and directly in line with your forearms."

NEVER

... allow your lower back to round as you press the handles forward, which puts your lumbar spine at risk. Maintain the natural curve in your lower back by bracing and contracting your core, she advises.

MIND-MUSCLE

While the trajectory of the handles is directed by the machine, imagine your hands drawing a straight line out and back from your chest to keep your brain focused on the movement and to engage the correct muscles.

BARN BURNER

Perform a set of one-arm machine presses with each side to pre-fatigue your chest, then move into your two-arm machine presses for a burn that won't quit.





NO. 3 | LEG PRESS

Because of its favorable leverage, a leg press tends to feel “easier” than a barbell squat. But don’t be fooled: It still engages all the same muscles and gives your lower body a thorough thrashing.

ALWAYS

... press using your entire foot rather than just the balls of your feet, which can put the numerous bones and connective tissues in your feet at risk for injury, Salvador says.

NEVER

... let your knees buckle in or flare out. Keep them in line with your hips and feet in both directions to protect your joints, she recommends.

MIND-MUSCLE

“Think like a tree,” Salvador says: Keep your hips and glutes rooted into the seat and your head against the pad to protect your lumbar spine and enhance the driving power of your quads, hamstrings and glutes.

BARN BURNER

Superset leg presses with prisoner jump squats or split squat jumps.

NO. 2 | LAT PULLDOWN

“If you’re looking to sculpt your back, lat pull downs are actually more versatile than pull-ups,” Roberts says. His reasoning: With a machine, you can more easily manipulate your resistance, angle of pull and grip, allowing you to target the latissimus dorsi and teres major in a multitude of ways.

ALWAYS

... pack your shoulder blades to engage your lats and rhomboids while reducing the involvement of the upper traps. “You’re basically trying to stop your scapulae from excessive movement,” Robert says.

NEVER

... let your back round as you pull the bar down, which puts your lumbar spine in a vulnerable position. Maintain the normal, natural curvature of your spine, keep your chest lifted and lean slightly backward throughout each rep.

MIND-MUSCLE

Picture what your body looks like when you’re doing a pull-up, then mimic that position with a pulldown. It’s basically the same, except instead of pulling yourself up toward the bar, you’re pulling the bar down toward you.

BARN BURNER

Superset wide-grip pulldowns with reverse-grip dumbbell rows to failure.





NO. 1 | HACK SQUAT

This is the best machine you'll ever hate. "Hack squats put more emphasis on the quadriceps and glutes than any squat [you could do], and [they] are great for building muscle and developing lower-body strength," Roberts says.

ALWAYS

... maintain control and consistency with your reps. "And do not bounce out of the bottom," Roberts warns.


NEVER

... let your butt "wink" — e.g., the point when your lower back rounds and your tailbone tucks under at the bottom of a rep — which puts your lumbar spine under extreme stress. Warm up properly before your workout, and practice hip mobility moves on the reg. "Sitting in a deep bodyweight squat for two minutes is very effective," he says.

MIND-MUSCLE

To help develop a natural rhythm (and maintain that all-important control), match your breathing pattern to your reps: Inhale deeply before a rep, hold it as you descend, and exhale completely as you rise back up.

BARN BURNER

To build speed and power, perform 20 broad jumps after each set of hack squats. For those seeking endurance, Roberts recommends doing a 90-second wall sit after each set. 

THE ULTIMATE UPPER-BODY SUPERSET WORKOUT

This workout corrals the best machine moves for your back, chest, shoulders and arms into one intensive session, along with some of our experts' favorite burnout exercises.

EXERCISE	SETS	REPS
Lat Machine Pulldown	3	6-10
— superset with —		
Reverse-Grip Dumbbell Row		to failure
Seated Machine Cable Row	3	to failure
— superset with —		
Resistance-Band High Row		to failure
One-Arm Chest Machine Press	3	8-10 (each arm)
— superset with —		
Two-Arm Chest Machine Press		to failure
Seated Machine Overhead Press	3	8-10
— superset with —		
Exercise-Band Lateral Raise		20-30
Reverse Pec-Deck Flye	2	10-15
— superset with —		
Straight-Arm Dumbbell Kickback		10-15
Seated Triceps Machine Extension	2	8-10
— superset with —		
Triceps Push-Up	2	10
Machine Preacher Curl	2	8-10
— superset with —		
Resistance-Band Curl		to failure