

Overhaul+

MAINTAINING THE MIND, BODY AND SOUL

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MASTER THE THREE LEVELS OF RECOVERY

Exercise might break you down to build you up but what happens when the first half of the equation is happening? Use these healing tools to make sure you're always in the game

Imagine getting into a car accident every week. Well, this is pretty much what happens to every athlete when they compete. Injuries are bound to happen to sportsmen of all levels, and while some have access to the best medical care, the majority don't, so they take far longer to heal.

Fortunately, the techniques available to the elite are becoming more accessible and affordable to everyday athletes. So here are the things you can do from home to promote recovery, as well as some cutting-edge techniques you can employ when medical intervention is necessary.

These medical advancements won't break your bank balance but they can get you back on the field without surgery. This puts exercise consistency in your crosshairs so you can keep doing what you love and forge new PBs – minus the niggling injuries. ➤

 **YOUR TRAINER**
DR EUGENE A. BATELLI

Foot and ankle surgeon specializing in treating high-end athletes, like marathon winners and NFL players. Visit: metroankle.com



LEVEL 1:

HOME COMFORTS

Essential techniques you need to do at home to accelerate recovery after a tough workout so you can get back to training as soon as possible

EAT THE BASICS

Pay special attention to what you eat before and after your workout. Be sure to have roughly 30g of high-quality protein before and after each session to trigger the repair and building of more muscle.

SHIVER YOURSELF RECOVERED

Take a cold full-body plunge after a workout. This technique – used regularly by footballers – significantly reduces soreness and inflammation for up to 24 hours after exercise. It's as simple as grabbing a few bags of ice from the local gas station, dumping them into the tub and jumping in.

APPLY MORE PAIN

Much of the soreness that results from exercise occurs when muscles and fascia (connective tissue running throughout the body) become knotted. Rolling out muscles with foam rollers can promote self-myofascial release. This helps remove knots and prevent muscle imbalances from developing. While not comfortable, the benefits outweigh the aches and pain.

WHEN IN DOUBT, CONSULT YOUR DOCTOR OR TRAINER TO GET YOU STARTED ON THE RIGHT TREATMENT

RUB IT DOWN

Massage is another option that helps break up scar tissue and reduce stiffness associated with muscle repair and recovery. Deep-tissue massage increases the flow of blood throughout the body and helps to reduce inflammation.

EXERCISE MORE

There are currently multiple studies focusing on the concept of employing active recovery, where you engage in low-intensity exercise after your workouts. There are two basic forms of active recovery. One is done during the post-workout cool-down period after

an intense workout. The second takes place during the days after a competition or a difficult session, because doing low-intensity activity could assist blood circulation, which then helps remove lactic acid from the muscle.

Low-intensity active recovery (working at 30% intensity) appears to significantly reduce accumulated blood lactate and speed up muscle recuperation. Additional data is needed but the best advice is this: try full rest and then try active recovery to see which technique your body responds to best.

TURN UP THE HEAT

Your body is made up of 50-75% water, on average, depending on your age and gender. Since heat and cold affect liquids in such a powerful way, it only makes sense to use heat and cold therapy when treating injuries. It can be a complicated debate so let's keep it simple and break it down.

If your injury has characteristics of heat, pain, swelling and redness, icing is the way to go. Ice will remove the heat and inflammation but you will also slow down blood flow, contracting the tissue in the area. Be aware that ice can slow down the healing process if used for too long.

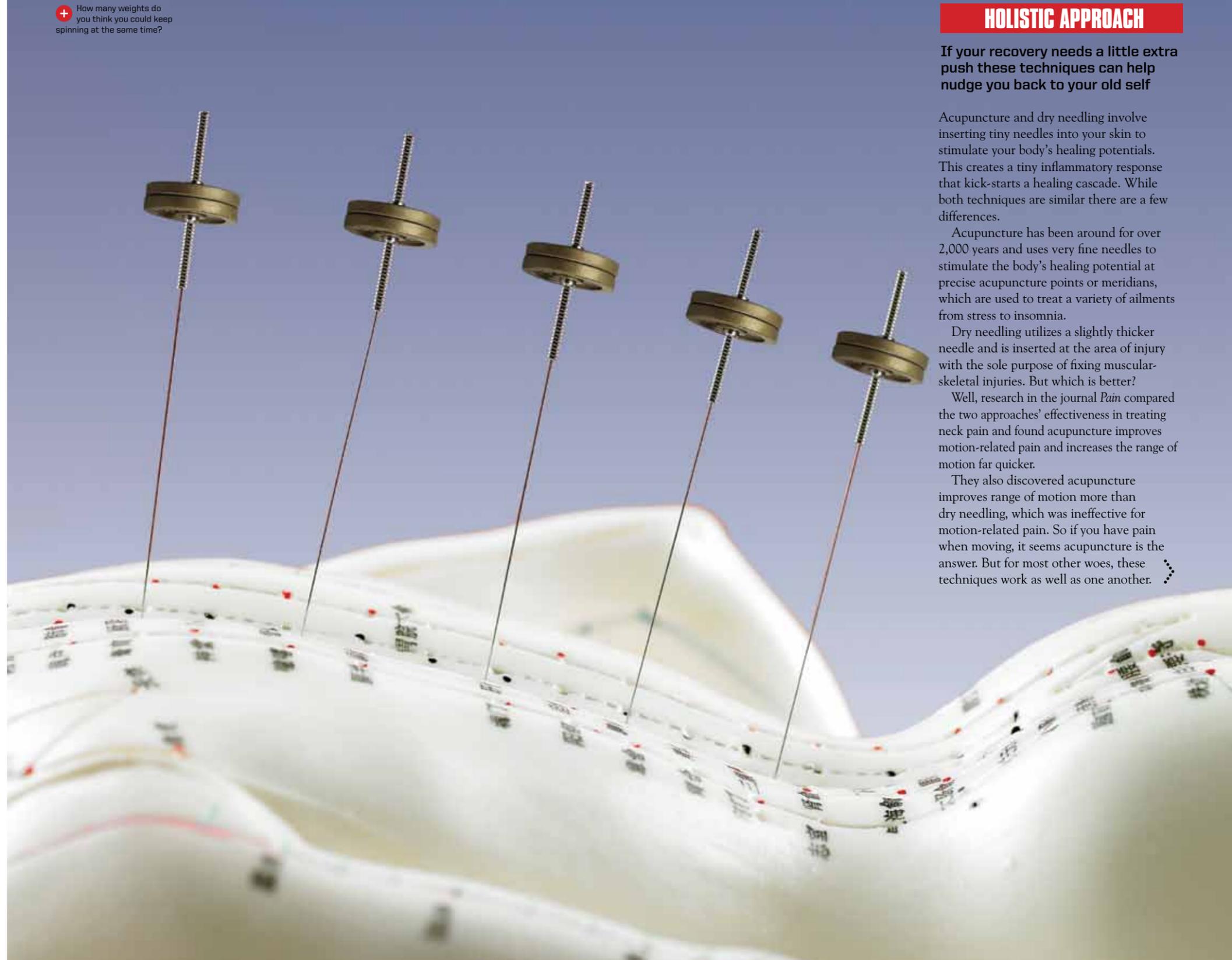
If your injury has less swelling, pain and inflammation but stiffness and decreased mobility remain, apply heat. Applying it will increase blood flow and soften tight muscles and tendons.

When in doubt, consult your doctor or trainer to get you started on the right treatment.

STAY OUT OF THE MEDICINE CABINET

Anti-inflammatory medications and spices, like turmeric and ginger, can speed up muscle recovery, so work them into your diet. However, if you're trying to build muscle, then non-steroidal anti-inflammatory drugs (NSAIDs, like ibuprofen and aspirin) may hinder hypertrophy (muscle growth). In other words, if your goal is bigger biceps and quads, a little soreness may just be part of the process.

+ How many weights do you think you could keep spinning at the same time?



LEVEL 2:

HOLISTIC APPROACH

If your recovery needs a little extra push these techniques can help nudge you back to your old self

Acupuncture and dry needling involve inserting tiny needles into your skin to stimulate your body's healing potentials. This creates a tiny inflammatory response that kick-starts a healing cascade. While both techniques are similar there are a few differences.

Acupuncture has been around for over 2,000 years and uses very fine needles to stimulate the body's healing potential at precise acupuncture points or meridians, which are used to treat a variety of ailments from stress to insomnia.

Dry needling utilizes a slightly thicker needle and is inserted at the area of injury with the sole purpose of fixing muscular-skeletal injuries. But which is better?

Well, research in the journal *Pain* compared the two approaches' effectiveness in treating neck pain and found acupuncture improves motion-related pain and increases the range of motion far quicker.

They also discovered acupuncture improves range of motion more than dry needling, which was ineffective for motion-related pain. So if you have pain when moving, it seems acupuncture is the answer. But for most other woes, these techniques work as well as one another. ↗

LEVEL 3:

MEDICAL APPROACH

When pain starts to cost you fitness, here are two treatments you should consider before throwing yourself under the knife

PLATELET-RICH PLASMA THERAPY

If the at-home treatments are not addressing your issue, or you have an injury that requires medical intervention, there are some effective and innovative techniques and procedures to consider.

One of these is called platelet-rich plasma (PRP) therapy. PRP is a substance made from your own blood that triggers healing. It's a relatively simple, non-surgical treatment for joint injuries and arthritis that merges cutting-edge technology with the body's natural ability to heal itself.

The PRP is a concentration of platelets, which jump-start the healing process thanks to their richness in growth hormones and cytokines that tell your tissues to increase rebuilding to enhance healing. When PRP is injected into the damaged area, it stimulates a mild inflammatory response, which triggers healing. This leads to restored blood flow, new cell growth and tissue regeneration.

In a nut shell, a doctor withdraws blood from your arm, spins it in a centrifuge to separate the plasma from the white and red blood cells, and then, using ultrasound technology, the PRP is gently re-injected at the site of injury. This process may be repeated 1-2 times over a 6-16-week period. Since the goal is to stimulate an inflammatory response, non-steroidal anti-inflammatory medications like ibuprofen or naproxen should not be used.

This concentration of platelets increases healing growth factors approximately 6-8 times greater than normal, causing an inflammatory response that stimulates healing. PRP, as a treatment, is excellent for muscle tears, tendon tears, soft tissue injuries, joint pain and chronic conditions like achilles tendonitis, plantar fasciitis and tennis elbow. It enhances and stimulates the body's natural healing forces and may eliminate the need for more aggressive treatments like long-term medication, steroid injections or surgery.

Patients can see a significant improvement in symptoms as well as a remarkable return of function. While cortisone shots mask symptoms, PRP actually heals. This method



+ Extracorporeal shockwave therapy creates sound pressure waves to stimulate an inflammatory response

has been around for 30-plus years and was originally used in spinal surgery to assist in bone healing. Current literature recommends PRP over cortisone as first-line therapy for chronic tendonitis.

EXTRACORPOREAL SHOCKWAVE THERAPY

If PRP is not for you and needles make you a little queasy, extracorporeal shockwave therapy (ESWT) is a great alternative. It creates sound pressure waves to stimulate an inflammatory response, like PRP, and enhance blood flow to the area for increased healing. Damaged tissue gradually regenerates and eventually heals.

ESWT is a non-invasive procedure and is performed on an outpatient basis, since it lasts approximately 15 minutes. During the treatment, the physician targets and directs therapeutic pressure waves to the affected area. The treatment is repeated usually two to three more times and may take from

one to three months to be fully effective. Like PRP, NSAIDs are avoided and heat is applied to the area. ESWT in conjunction with physical therapy is also extremely effective for chronic conditions.

Many doctors use a variety of the techniques and procedures outlined above, no matter the age or the skill level of the athlete they're treating. They work, period! Soreness and injuries are inevitable in every sport and these techniques are useful in getting you back on track, whether that's in the gym or on the field.

Find what works for you and don't hesitate to consult your specialist. Remember, nothing beats getting the right amount of sleep, eating well and listening to your body, because it has the incredible ability to take care of itself if given the time and opportunity to do so, and sometimes that's just what the doctor ordered. ●