Exercise

Description

To Jesus:

You can save this to a “Health” folder for easy access later.
Use this as a starting point for your own research and share with your doctor as appropriate.

You can use drugs.com or other trusted health websites to look up the latest information on prescription & herbal drugs possible side & interaction effects. Typing in the name of two medications or a medication & an herb in a search bar of most browsers will bring up results with their interaction effects.

Exercise

What exercise promotes good health, improved mood, & longevity the most?

Hiking, biking or walking in nature, unlimited health & longevity benefits (more time doing, more benefit) & even greater mental health improvement if also talking with a friend

Hiking in nature while talking to a friend

Hiking provides weight bearing exercise & uneven, up & down & side to side exercise that improves muscle strength & balance & improves longevity the most the more time done. This prevents falls, which as people get older & their bone density may get lower can cause a hip or leg fracture, which often leads to weight gain, lack of exercise & quickly declining health & lifespan.

Walking sticks

Walking sticks can help greatly if they improve the speed of hiking or fast walking.

Nature & EFT

Exercising in nature also increases the frequency of sweeping the eyes back in forth, which gives the benefits of EFT in lowering emotional trauma or conflict. Exercising in nature improves mood & mental health far better than antidepressants.

Biking & walking

Biking in nature is the second best activity as it provides low impact weight bearing exercise. Walking in nature is next best as it provides less weight bearing exercise than hiking or bicycling. Walking as fast as possible for one minute at the end of a leisurely walk can have the same benefits as a much longer moderately fast walk in health & longevity.

Paying conscious attention to balancing, pushing off & landing the foot when walking while holding the arm of a helper improves people with Parkinson's ability to walk faster. Then adding the arm swing when walking alone. Increasing the speed of walking over time to the greatest safely possible appears to reverse Parkinson's symptoms by growing new motor neurons.

Fast walking vs jogging

What is the difference between fast walking & jogging, which has a negative impact on the joints of the body & doesn't improve health nearly as much? One foot must always be touching the ground. It should feel as if the person is barely touching the ground when walking the fastest.

The fastest speed of walking is most important, and if walking for enjoyment people can walk at their own pace then max out their speed at the end of the walk because a 30 second fastest walking burst can provide nearly the same benefit as a 5 minute moderately fast walk.

bu.edu/neurorehab/files/2014/02/The-Effect-of-Exercise-Training-in-Improving-Motor-Performace-and-Corticomotor-Excitability-in-People-with-Early-PD.pdf

reverseparkinsons.net/articles.php

Stamatakis E, Kelly P, Strain T, et al
Self-rated walking pace and all-cause, cardiovascular disease and cancer mortality: individual participant pooled analysis of 50 225 walkers from 11 population British cohorts
British Journal of Sports Medicine 2018;52:761-768.

Nature & friends

An even greater mood & mental health benefit is seen when talking with a friend while hiking, biking or walking in nature. Best may be their physical presence, but if not available physically, talking on the

phone with a friend while exercising also improves mood over just exercising.

Jogging’s limited benefits

Because of it’s high impact on the joints (made far worse if footwear elevates the heal higher than the ball of the foot) & decling benefits after just 10 miles, jogging is limited in benefit. After just 10 miles a week the longevity benefits start to reduce to the level of someone who doesn’t exercise at all.

Strength training

Strength training provides great longevity benefits & mood improvement up to an hour per week. After an hour the benefits to longevity don’t increase & quickly decline. An hour can be achieved by doing one set of each exercise instead of three, as many studies show the same benefit. Then a half hour of weight training twice a week appears achievable. Even better appears to be doing one set (of seven or less) of arm & a set of leg targeted weight bearing exercises daily, immediately after eating the largest carbohydrate meal of the day. Recovery is much quicker than doing two or more different weight bearing exercises for the arms or the legs.

High intensity exercise

People can get the same longevity & health benefits of 45 minutes of endurance exercise by doing a half minute to a minute of high intensity exercise, especially after eating a meal with carbohydrates at the end. Our bodies recover with much greater & faster capacity increase from high intensity exercise than endurance exercise. It is good to do a minute or two warmup/dynamic stretch first & speed up over a minutes time to the targeted high intensity. Step machines or actual stairs may be best, then bicycling or stationery bicycles then elliptical then treadmills. Treadmills may appear to be limited in how fast they can be made to roll, but some treadmills provide a lot of resistant traction of used in the off mode & started by leaning forward & pushing with the feet at the back of the treadmill to get it started (too hard to start in the middle). Then it can feel like running in sand as the body has to supply all of the energy to move the treadmill.

Self defense

One of the best high intensity exercises for longevity is self defense punches & kicks. The person who successfully fends off a physical attack is usually the person who can punch or kick with the most force for the longest time. So doing one set one type of punch (like straight punch or hook or uppercut) or kicks (like front, back, side, roundhouse, axe) after eating or before bedtime (lowers cortisol & appears to improve time to sleep & depth of sleep) appears to increase self defense capacity while also increasing longevity.

Athletic shoes

The benefits can be improved if shoes are worn (or barefoot) that are the same height at the ball of the foot as the heel. Then the ball of the foot hits first & takes the weight of the body into the calf muscles, which absorb the shock & provide 20% energy back to the next step- why flat shoed & shoeless runners win most marathons- creating less wear & tear & reusing energy. When the heel hits first, 3000lbs of force run through the foot, ankle, knee, hip & back, apparently the main cause of foot, ankle, knee, hip, back & neck damage, pain & inflammation.

Timing & blood sugar

The best time to exercise is immediately after eating, especially after eating carbohydrates. Not only do the carbohydrates fuel the exercise, but the exercise uses up the blood sugar increase after eating he carbs & the body doesn't need to use insulin, increasing

insulin sensitivity & decreasing or eliminating most diabetes, heart disease & cancer.

Best combination

So the best exercising for longevity, physical & mental health & mood appears to be after a meal (especially if eating carbs at the end of the mel) doing one set of arm & one set of leg (& in rotation stomach & back) weight bearing exercises, then a high intensity burnout on the stairs, bicycle, elliptical or treadmill, then hiking in nature with a friend then biking then walking then jogging. If there is little time or

My workout

Here's my workout. Note that except for the stomach workout, all the others are 1 different arm muscle 1 different leg muscle each day. I'm always working out a different set of muscles than the exercise the day before.

Dynamic stretch & static stretch

I first do an empty set at zero or ten pounds for ten lifts, known as a dynamic stretch. Just doing the motion with little or no weight prepares the ligaments, tendons, muscles & bone for the full weight

& has been shown to prevent injuries & muscle/tendon/ligament pulls.

Static stretches are effective & safe after a workout, preferably in a sauna or whirlpool or steamroom when the muscles, ligaments & tendons are loosest. People stretch out a muscle & hold it for three minutes for best benefit. Less than three minutes has less benefit, & more than three minutes doesn't give much more benefit for the time spent.

The three minutes are usually started with a light stretch that relaxes at 45 seconds then gets increased to light tension again until relaxation of the muscles & again two more times. So it's like four light 45 second stretches of the same muscle.

One set only

I then do only one set of seven reps of the full weight. My research shows one set of seven reps is the best combination for strength building & safety. It's also tested best in the 4 Hour Body.

7-9 reps

Other people do three sets but my research shows it doesn't help unless doing really high level weightlifting for sport. Going to exhaustion is what's important for maximum strength building, no

matter how many reps or how much weight. Once I can do nine or more of a weight, I add more weight next time that I can only do up to seven of.

Maxing out

Every couple months I do a maxout. That is the greatest amount of weight/resistance I can do one of. Maxing out challenges the muscles, ligaments, tendons & bones to be able to carry more weight than we work out with daily. The reason we don't do it every time is using max weight/resistance all the time could wear down the joints.

First is the stomach & back.

I use the machine at the south end of the pit fence where I pull two handles forward with my hands on each side of my head & lift a bar with my ankles.

I use the machine on the left of that for side stomach muscles. I set bar to the middle & my knees first to one side to do a set of seven, then to the other side for seven.

I go near the northeast corner where on the east wall at the end of the mirror is a rack of kettlebells (also a rack in the pit). I do a kettlebell swing. These were found to shape the but & stomach the fastest by Tim Ferris in The 4 Hour Body.

I go to the west wall in the middle of the pit fence there's a back machine where I strap my waist in, & push backward with my neck on a bar until I am straightened out (like standing straight but diagonally.

I go to the machine just in front (from where we sit) of the side stomach muscles. I put the setting all the way to the back & stand in a way as to work on my rotator cuff, in & then out.

I hit the punching bag in the pit if I like.

Stretch in the sauna-

Groin

Hamstring

Side legs

Calves

Next time:

Bench press using the controlled bar on the west wall.

I then do calf lifts on the machine along the east wall near the north end of the pit fence.

I then do triceps on the machine just north of the entrance to the pit.

I then do ankles curles (toward knee) on the same machine as the calf lifts.

Groin stretch if I didn’t do it last time.

Neck stretch.

Next time:

Seated lifts starting on top of my shoulders on the same controlled bar as bench presses.

I then do a squat on the machine just north of the last one. Chest up, back arched, feet pointed out. 4 holes front, feet at 3 beans from top, 4 holes for the weight catch by my legs.

Arm curls on the machine on the southeast side of the pit fence.

I do the opposite of the groin machine, where knees push out, near the southeast corner of the pit fence.

I do a calf stretch in the sauna, no neck stretch.

Next time:

I do pullups on the machine (there are two near each other) along the east wall near the north end.

I do the leg curl on the northeast corner of the pit fence.

I do either the seated row machine using the horizontal grip in between the two pullup machines on the east wall near the north end, or use the verticle grip row weights directly ahead of the pit stairs.

I do the thigh extensions right next to the top of the pit stairs.

I stretch the side thighs.

Next time:

I use the wing machine just in front of the side stomach machine with the arms set out on each sise of my shoulders & flex them forward to touch in front of me.

I do the leg press machine near the west wall mostly to the north.

I do the stationery two handles & push myself up from the ground that is on the north side of the iron pit fence.

I do the groin exercise machine right near the stairs going up behind the treadmills.

Back of knee stretch

Neck stretch

Saving this to a “Health” email folder may make access easier.

You can use this as an aide to your own research and share with your doctor as appropriate.

You can use drugs.com or other trusted health websites to look up the latest information on prescription drugs, herbs, foods or other treatments possible side & interaction effects by typing in the name of two drugs or drug/herb and interaction effects into a search engine.

Exercise

Lifting weights increases metabolism, as does aerobic exercise. Weightlifting, high intensity aerobic exercise, and surprisingly sauna usage all increase human growth hormone, testosterone, strength, and endurance. Exercise improves health, quality, & length of life.

How to get started?

What holds a lot of people back from exercising more is the amount of time it takes. I've studied a lot of research on weightlifting & aerobic exercise and have found how to get the most benefit for the least amount of time.

Static Stretching

Static stretching right before lifting weights or aerobic exercise degrades athletic performance, in a meta-analysis of over 100 studies. It doesn't help to

Acute effect of passive static stretching on lower-body strength in moderately trained men.

Gergley JC.

J Strength Cond Res. 2013 Apr;27(4):973-7. doi: 10.1519/JSC.0b013e318260b7ce.

Does pre-exercise static stretching inhibit maximal muscular performance? A meta-analytical review.

Simic L, Sarabon N, Markovic G.

Scand J Med Sci Sports. 2013 Mar;23(2):131-48. doi: 10.1111/j.1600-0838.2012.01444.x. Epub 2012 Feb 8.

When to do a static stretch?

Static stretching is best on off days or AFTER exercising, preferrably in the sauna which decreases injury & increases flexibility. I have noted which stretches I can do after each individual set of lifts, and which I cannot. So I do stretch in the sauna after my lifts. The yogis who can do unbelievable feats like fold themselves into boxes eat a special diet & do a special type of stretch in a heat elevated room. They stretch each muscle for three minutes at a time, not the 30 seconds I was taught when I was young. Over many years they found that stretching less than three minutes doesn't provide as much benefit as three, and stretching more than three minutes gives reducing returns.

They start out with a light stretch & hold it for 30-45 seconds, imagining their muscles relaxing, and after 45 seconds or so their muscle relaxes completely & they move the stretch a little farther out, still with just a mild tension. After four cycles of this (3 minutes) the first time I used this I stretched twice as far as ever before on every muscle I tried. I only need to stretch each muscle once every two weeks now & I stay so limber I can jump into any exercise almost full speed & haven't pulled a muscle in years. I stretch my neck muscles & back more frequently to keep my core limber. I used to mildly to majorly pull muscles every couple of months- now not at all.

Dynamic stretching

Dynamic stretching is doing a light version of the exercise you'll be doing. If someone is going to go for a run, jogging in place for a

minute “warms” the body up & prepares it for the exertion to come on those same muscles. For weightlifting, it means doing the lift with no weight first for 7 to 10 reps, then doing the lift with the target weight used for the lift. This can prevent injuries & joint damage in the subsequent lift or run.

Dynamic stretching before exercise is as essential as static stretching after exercise or on a day off. Using both of them helps not only the muscles but the ligaments, tendons, & joints as well.

Aerobic exercise

New research provides evidence for what I’ve been doing for a while- one minute burnouts, at least once per week. All the newest research is showing that one minute of intense workout is worth 45 minutes of less intensity, or endurance exercise. I call it survival of the fittest. At one point in our history we were rewarded by a big burst of compressed activity. We had to take immediate action to avoid being eaten, either running, attacking, or defending. So when we do one minute of super high intensity, our bodies think that is the level we need to get to to avoid getting killed, even if we are more sedentary at other times.

I can do two minutes warmup on an exercise bike set to the highest tension, or stair machine at its fastest setting, or a treadmill on its highest incline but NOT turned on (its provides more resistance if off) or just running- doing a different one every week. After two minutes warmup I burn out for one minute at the highest rate I can comfortably go. When starting I only did a mild elevation of heart & breathing for safety reasons. After a couple weeks, I went at 70% of my highest capacity of heart rate & breathing. Then I do a warmdown for a couple minutes.

They key is that the body recovers to the highest point of aerobic exertion, no matter how long the exercise. So those people jogging for half an hour who don't burn out (sprint as hard as possible) at the end won't have the aerobic capacity as I do after two months (8 sprints), even if they've been jogging for five years or are a lot younger. As long as I increase gradually for safety, I get to be in very high aerobic fitness, for just five minutes a week.

Interval training is where people run for a set amount of time & push themselves harder at intervals. The difference with my workout is that I've found the only interval needed is one- just one sprint surrounded usually by a warmup & warmdown to get the same benefits but in a fraction of the time.

Anyone wanting to get more benefit can by exercising for a longer period & just burning out at the end. But when we only have a couple minutes, knowing we can get most of the same benefit of 45 minutes of exercise in just 30 seconds of burnout should help us make the decision to exercise even when we have very little time, making us much healthier & fitter. It also makes it far easier to jog for 30-60 minutes when we do want to.

http://fitness.mercola.com/sites/fitness/archive/2016/05/27/super-slow-weight-

training.aspx?utm_source=dnl&utm_medium=email&utm_content=tfa1

Weightlifting

Back when I was in high school, I was taught to do three sets of ten repetitions for each lift. So for bench press I would do ten bench presses, then wait a few minutes, then ten more, then ten more. Doing a number of different lifts using this model took hours to complete.

I got back into weightlifting when I read research that reduced the amount of repetitions & sets needed for the greatest & fastest strength gains. I have done as little as 1.5 repetitions only for every type of lifting I do. There are ways to lift even more weight, but again they involve hours more time per day, a lot more lifting, and specialized diet & often supplements. This is the alternative to that, and one that for me has worked much better than more reps & more sets. Here's how.

Pilates

The first thing I learned was the Pilates revolution which suggested that building core strength in the muscles of the abdomen & the back is the essential first step to in getting stronger. This has been shown to reduce muscle tears & prevent a lot of weightlifting injuries by making the base strong. So for my stomach I use a machine where I sit on a seat, grasp handles on both sides behind my head, and put my ankles forward behind a cushioned bar. For the lift I pull my hands forward & my ankles forward to get close to meeting in front of me. It's like a situp while sitting up in a chair, and with weight (up to 190lbs) involved.

The back machine I use looks like I'm reclining at an angle, with a bar to put my ankles behind, a strap for my waist, and a cushioned bar behind my head. I push back against the bar to extend my back backwards.

Kettlebells

I use a kettlebell swing under the legs & up in front over the waist. This kettlebell swing is believed to be one of the most complete workouts, especially for the core & trunk. In "The Four Hour Body" is was tested to be the fastest way to shape the stomach & backside for women. I also swing the kettlebell all the way left & right over my hips while standing to work out my side stomach muscles.

What weight to start at?

When I restarted weightlifting I realized something- it's not just our muscles we are working out, we are also strengthening our ligaments, tendons, & bones. So instead of starting some lifts at 50lbs, or 100lbs, or 150lbs, I started a lot of them at 10lbs. Why? To give my ligaments, tendons, & bones time to catch up with my

muscle strength. This may not be as important for all arm & leg lifts, but is essential for stomach & back lifts. I did increase the weight the next time I did that exercise, 5 or 10 lbs at a time.

How fast do I go?

Weightlifters for years have been using very slow lifts, and now there's good research behind the technique. Going up & down slowly on the lift is key to faster strength gains. Going up very slowly, 10-15 seconds, then down slowly, 10-15 seconds, increases strength 50% faster than just jerking the lift as fast as possible.

Jerking the weight fast only works out the initial muscles and momentum lightens the load on the subsequent muscles. The superslow lift & setdown makes every muscle along the way work just as hard as the beginning muscles. The combination may be best- I do six lifts fast & then the last lift very slowly to get the best of both types of lifting.

How many repetitions?

Other new research shows that it doesn't matter how much weight we lift, whether 10lbs or 200lbs, just whether or not we lift to exhaustion. 10lbs will need far more reps than 200lbs for any lift, but if the person lifting 10lbs lifts till exhaustion & the person lifting 200lbs stops short of exhausion, the person lifting 10lbs will have greater strength gains.

In “The Four Hour Body”, Timothy Ferriss reports that he found seven repetitions to improve strength gains the most. So I do a weight that I can lift about seven times, with the seventh being the superslow lift up & down. The key, no matter how many repetitions, is to lift to exhaustion for the greatest strength gains.

http://fitness.mercola.com/sites/fitness/archive/2016/05/27/super-slow-weight-training.aspx?utm_source=dnl&utm_medium=email&utm_content=tfa1

Superslow lifts & knees

When I do the superslow leg lift I don’t go as far down with my knees as with the quick lifts. I can comfortable bend my knees farther on a fast lift than on a superslow lift.

Rehabilitation

Doing ultralight slow lifts with repetitions to exhaustion may maximize muscle strength gains & minimizing joint stress during rehabilitation or after surgery. Then when the doctor/trainer/physical therapist says more weight is ok, more weight can slowly be added.

Varying the muscle targeted

I do arms, legs, then a different arms lift, then a different legs lift with usually three to four minutes in between each. I target a different set of muscles on the two arm & two leg weightlifts. Working out different muscles allows me to get four different lifts in that don't interfere with each other.

Varying the lift

It appears to be very useful to mix up the type of weight lifted. So for bench press I may use a straight bar one time, two barbells the next time, and a universal machine the next time. This avoids the muscle only getting good at one type of lifting that may not generalize as well to real life lifting. Using a controlled lifting bar that's angled can also give a slightly different workout, I just reverse my seating position.

Time off

In between every lift session I take two days off for recovery (or until I'm not sore). The time off is essential for recovery & to avoid muscle burnout & collapse. I do four rounds of 2arms/2legs lifts, then I do my back & stomach lifts as my fifth & last round. When I was younger I might have been able to take just one day off. What's important is to avoid lifting if still sore from the last lift.

Weightlifting etiquette

Avoid trying to "reserve" your next lift while your still doing or about to do your current one. If someone is doing multiple sets at a machine/station, wait till they finish one set then ask to work in & quickly do your reps & switch the setting back for them. Nothing is

ruder than trying to reserve multiple machines. I've seen people reserving two other stations & while lifting at another station start YELLING at people trying to use one of their two "reserved" stations. Those people get kicked out of gyms quickly.

Visualization

Studies show that imagining yourself 20yrs younger (if over 40), faster & stronger significantly improves performance on athletic tests. Visualization seems to prep the body ahead of time for optimal performance. This works for skill based performance as well- visualizing a successful archery shot/bowling roll/pass/hitting a baseball etc. significantly improves performance.

Rebounder/trampoline

Jumping on a rebounder/trampoline (rebounders cost as little as $30) appears to help move lymphatic fluid around the body. Unlike blood, lymphatic fluid is dependent upon movement to get distributed, and jumping appears to help immunity, bone strength, balance, reduce edema/vericose vein/fat, remove wastes, & rapair tissue after injury. Jumping on a (mini) trampoline is more beneficial than running & avoids the impact injuries & wear and tear. Controlled jumping is made safer with stabilizers like handles and enclosures for full trampolines.

Journal of Electromyography and Kinesiology

Volume 21, Issue 3, June 2011, Pages 512-518

Mini-trampoline exercise related to mechanisms of dynamic stability improves the ability to regain balance in elderly

Fernando Amâncio Aragão, Kiros Karamanidis, Marco Aurélio Vaz, Adamantios Arampatzis

https://doi.org/10.1016/j.jelekin.2011.01.003

Effects of a trampoline exercise intervention on motor performance and balance ability of children with intellectual disabilities

Paraskevi Giagazoglou, Dimitrios Kokaridas, Maria Sidiropoulou, Asterios Patsiaouras, Chrisanthi Karra, Konstantina Neofotistou

Research in Developmental Disabilities 34 (2013) 2701–2707

J Sports Med Phys Fitness. 2018 Mar;58(3):287-294. doi: 10.23736/S0022-4707.16.06588-9. Epub 2016 Jul 21.

Effects of a mini-trampoline rebounding exercise program on functional parameters, body composition and quality of life in overweight women.

Cugusi L, Manca A, Serpe R, Romita G, Bergamin M, Cadeddu C, Solla P, Mercuro G

Gerberich, S.G. et al. (1990). Analysis of the acute physiologic effects of minitrampoline rebounding exercise. Journal of Cardiopulmonary Rehabilitation, 10, 395–400.

Rebounding: A Low-Impact Exercise Alternative

McGlone Colleen B.S.; Kravitz, Len Ph.D.; Janot, Jeffrey M. Ph.D.

ACSM's Health & Fitness Journal: March-April 2002 – Volume 6 – Issue 2 – ppg 11-15

https://www.acefitness.org/education-and-resources/professional/prosource/october-2016/6081/ace-sponsored-research-putting-mini-trampolines-to-the-test

http://www.domijump.net/trampoline-exercise-benefits/

Wim Hof breathing

The Wim Hof method- no longer feel cold/hot/stress/autoimmune overreaction

Wim Hof is a Dutch man who learned to become very resistant to cold & heat, learned to control his immune response to a strong degree, and learned to reduce his stress levels. He has the world record for being in ice up to the neck in a tub for almost 2 hours. He has ran a marathon in a desert at 104 degrees with no water or food, and one above the Arctic circle half marathon barefoot, full marathon with sandals. He has killed an injected bacteria that should have made him very sick in a medical experiment. Now he is teaching others how to do it, and it only takes one minute a day & people get big benefits after just the first time.

In this link is an explanation of how to do this his way, which includes meditation, a breathing method, and cold exposure:

http://highexistence.com/the-wim-hof-method-revealed-how-to-consciously-control-your-immune-system/

Here is the simplified one minute a day version-

If you have a heart or lung condition ask your doctor if fast breathing & holding your (non) breath is ok for you. If you are sick you can

wait until healthy before starting, and wait until after pregnancy to start this. Wim Hof wisely recommends only doing this from a secure sitting position for safety and NEVER around water.

He breathes in 30 times very deeply using his diaphram (sticking his stomach out). Then after the last breath he breathes out completely & holds his empty breath. He holds it until he has to breathe (not so long as to pass out, ever). Then he breathes in deeply & holds for 10 seconds. He recommends repeating it a couple more times.

Wim Hof has in the past recommended exercising during the breath holding like pushups or some other exercise on the ground to avoid falling. I do it after eating my rice (carbs) so I have the energy for the exercise, but if people would rather just hold the (empty) breath it appears to work nearly as well.

After I did this once for one minute the first time was able to be comfortable in my apartment at three degrees colder than ever before for a full day. Every time I do the breathing once a day I am able to experience greater & greater amounts of cold. Wif Hof recommends expanding this by exposing ourselves to cold showers or outdoors in the winter (a little at a time & safely) to speed up the process greatly.

Alternative technique-

This is another alternative. I believe this works by fooling the body into thinking no oxygen is available & has the body kick in more & more with anaerobic (no oxygen) energy production. It seems to work as well by letting all my breath out & holding my empty breath WITHOUT first breathing heavy for 30 seconds. The key is to pretend to try to breathe while holding the empty breath. So right when I let the air out & hold our empty breath, I then start flexing my lungs like I am trying to breathe. I hold my (empty) breath until my body makes me breathe.

This artificial attempt to fake struggle against holding breath seems to trick the body into kicking in the anaerobic energy production. It is faster & takes a lot less energy than breathing heavy first, but it is not as time tested as Wim Hof's technique. The best combination is probably to breathe in heavy 30 times like the classic Wim Hof technique, then immediately when holding the empty breath flex the lungs like I'm trying to breathe from the beginning. That may speed up the Wim Hof anaerobic energy effect even greater.

Conscious control of cold & heat

Wim Hof suggests paying attention to how the body feels & consciously giving energy to different parts, especially if they are cold. This is supposed to give conscious control of our body temperature. I did this in a sauna when too hot to stay in & thought about being cool inside & I was soon comfortable enough to stay another 40 minutes. Meditating seems to improve the conscious control of body temperature. I've also done this when out in the cold & it works just as well. It may also be useful to breath out & hold an empty breath once or twice whenever feeling too cold, hot, or stressed in order to get immediate relief as well as the long term benefit. Holding (empty) breath after an exhale is also supposed to

help cramping when exercising.

Benefits to athletes

The people Wim Hof train to do this have been able as a group to shatter the record for having a group together all hike to the summit of one of the biggest mountains, often in t-shirts for much of the way. The hyperoxygenation of the deep breathing during mountain climbing has lead to significantly higher oxygen levels than most climbers and outstanding physical endurance. I have found that after doing a high intenstity exercise during the empty breath holding time for a while, when I do the high intensity exercise without holding my breath I can do it for twice as long as before I started doing it during the empty breath holding techinique- a doubling of my endurance.

Control of stress

Wim Hof reports and I and others have found that our stress levels have gone down measurably since doing the breathing exercise.

Autoimmune responses

Wim Hof & the people he trains have been able to kill bacterial infections that should have made them very sick in an experiment after just 90 empty breath holding repetitions. That's three months when doing it once a day. It appears that their bodies are shutting down the overactive immune response to the bacterial infection. Other people have noted their autoimmune disorders (like rheumatoid arthritis) being helped greatly by the breathing method.

http://www.paddisonprogram.com/wim-hof-reversing-autoimmune-diseases/

http://www.medicaldaily.com/natural-inflammation-treatment-breathing-exercises-and-ice-baths-may-quell-immune-337890

https://www.newscientist.com/article/dn26102-three-ways-the-iceman-controls-his-immune-system/

http://www.livingflow.net/influence-immune-system-at-will/

http://www.livingflow.net/wim-hof-method-autoimmune-disease-rheumatoid-arthritis/

Cold exposure?

So I suspect that we get many of the benefits even if we don't do the extreme cold exposure that Wim Hof suggests and that holding our nonbreath/empty lungs is the key. Doing this once a day is easily possible (I do it after eating so I have the energy) and results start immediately, after the first time. When too cold or hot we can do the breathing technique on the spot, or even just holding our empty breath without the heavy breathing first.

Conscious control over internal temperature

What Wim Hof's suggestion of the extreme cold exposure (explained in the link) coupled with meditating on being warm appears to do is give conscious control over body temperature, especially with practice. We can all use this when we are in a situation we feel cold in.

Migraines

Here's how the method may help prevent migraines. Included is also the most effective way to treat migraines I've ever seen so far (cold pack on neck, feet in hot water).

http://3dayheadachecure.com/blog/can-the-iceman-freeze-migraines-forever/

http://3dayheadachecure.com/blog/10-reasons-why-the-wim-hof-method-freezes-migraines/

> Hyperventilation – Migraine stopped in it's tracks.
> by inmigraine

Conscious control over internal temperature

What Wim Hof's suggestion of the extreme cold exposure (explained in the link) coupled with meditating on being warm appears to do is give conscious control over body temperature, especially with practice. We can all use this when we are in a situation we feel cold in.

What else helps recovery from exercise?

Superstrong anti-inflammatories taken with a meal may speed healing like tumeric with a little black pepper or curcumin extract, ginger, astaxanthin, boswellia, bromelain, papain, and/or MSM (crystal version of DMSO). Research shows because they speed recovery & healing by increasing stem cell activity, anti-inflammatories allow people to work out again sooner & significantly speed up strength & aerobic gains. DMSO is a great topical anti-inflammatory that also helps other topical anti-inflammatories like boswellia be absorbed quicker. Some people don't mind but others don't like that it can make people smell like garlic.

Foam rollers

Using foam rollers along the muscles after a workout appears to reduce soreness and speed up recovery after exercising.

Grounding

Grounding is simply walking barefoot on earth. Skin to earth contract transfers negative electrons which may significantly reduce inflammation, stress and pain. Grounding may help lower

cardiovascular disease and death. Grounding appears to relieve muscle soreness and improve mood and sleep and reduce electric field sensitivity.

http://articles.mercola.com/sites/articles/archive/2017/02/25/grounding-recharge-immune-system-slow-aging.aspx?utm_source=dnl&utm_medium=email&utm_content=ms1&

J Environ Public Health. 2012; 2012: 291541.

Published online 2012 Jan 12. doi: 10.1155/2012/291541

Earthing: Health Implications of Reconnecting the Human Body to the Earth's Surface Electrons

Gaétan Chevalier et al.

J Inflamm Res. 2015 Mar 24;8:83-96. doi: 10.2147/JIR.S69656. eCollection 2015.

The effects of grounding (earthing) on inflammation, the immune response, wound healing, and prevention and treatment of chronic inflammatory and autoimmune diseases.

Oschman JL et al.

J Altern Complement Med. 2013 Feb;19(2):102-10. doi: 10.1089/acm.2011.0820. Epub 2012 Jul 3.

Earthing (grounding) the human body reduces blood viscosity-a major factor in cardiovascular disease.

Chevalier G, Sinatra ST, Oschman JL, Delany RM.

J Altern Complement Med. 2010 Mar; 16(3): 265–273.

doi: 10.1089/acm.2009.0399

Pilot Study on the Effect of Grounding on Delayed-Onset Muscle Soreness

Dick Brown, Gaétan Chevalier, and Michael Hill

Psychol Rep. 2015 Apr;116(2):534-42. doi: 10.2466/06.PR0.116k21w5. Epub 2015 Mar 6.

The effect of grounding the human body on mood.

Chevalier G.

J Altern Complement Med. 2007 Nov;13(9):955-67.

Can electrons act as antioxidants? A review and commentary.

Oschman JL

Applewhite R. “The effectiveness of a conductive patch and a

conductive bed pad in reducing induced human body voltage via the application of

earth ground.” European Biology and Bioelectromagnetics 2005; 1: 23–40

http://www.earthingoz.com.au/pdf/Applewhite_earthing_body_voltage_

Sauna/steamrooms/whirlpools/infrared sauna (heat rooms)

Afterwards I spend at least 20 minutes in the sauna, as research shows 20 minutes twice a week temporarily increases human growth hormone 500%, increases testosterone to younger levels, & increases endurance by 30%. I can’t emphasize enough how amazing that is. Professional athletes jeopardize their careers (&

sometimes health) by taking steroids & HGH to get a 5% increased edge. Using a sauna 20 minutes twice a week gives up to a 30% increase in performance. Steamrooms, whirlpools & infrared saunas appear to have the same benefit as dry saunas in studies. Heat rooms reduce cardiovascular disease up to 50%, dementia 66%, respiratory diseases by 41%, cardiac mortality & improve longevity 40%. It may be good for people to avoid heat rooms if they have unstable angina pectoris, recent myocardial infarction, and severe aortic stenosis. Drinking alcohol in a heat room may increase the risk of hypotension, arrhythmia, and sudden death.

It's not good to go into the sauna for too long BEFORE lifting because excess heat will temporarily reduce performance. The reason gyms are usually cool is that exposure to cooler temperatures may increase athletic performance. So standing out in the winter cold for a minute right before an athletic event may increase athletic performance.

But if you do your exercise to exhaustion IN the sauna you will get the same benefit as if you did high altitude training, albeit for a shorter period of time. So exercising to exhaustion IN the sauna can provide significant performance boosts.

Am J Med. 2001 Feb 1;110(2):118-26.

Benefits and risks of sauna bathing.

Hannuksela ML, Ellahham S.

Acta Endocrinol (Copenh). 1984 Nov;107(3):295-301.

Characterization of growth hormone release in response to external heating. Comparison to exercise induced release.

Christensen SE, Jørgensen OL, Møller N, Orskov H

http://articles.mercola.com/sites/articles/archive/2017/02/09/benefits-of-sauna-therapy.aspx?utm_source=dnl&utm_medium=email&utm_content=art1

Cold water immersion (CWI)

Cold water immersion (especially immediately after exertion) appears to improve recovery from a workout (but not necessarily a marathon). The cheapest (and best) way appears to be freezing water outside in the winter & filling the tub with the ice & tap water, or buying bags of ice. It does not appear to be as effective as using a sauna/steamroom/whirlpool but may be used right after a workout & right before a heat room to get the benefits of both.

Whole body cryotherapy (supercold booths)

Whole body cryotherapy in a couple studies has not shown to be better than placebo in recovery after a workout, and inferior to the far cheaper CWI.

Int J Sports Physiol Perform. 2017 Mar;12(3):402-409. doi: 10.1123/ijspp.2016-0186. Epub 2016 Aug 24.

Recovery From Exercise-Induced Muscle Damage: Cold-Water Immersion Versus Whole-Body Cryotherapy.

Abaïdia AE, Lamblin J, Delecroix B, Leduc C, McCall A, Nédélec M, Dawson B, Baquet G, Dupont G.

The Effectiveness of Whole Body Cryotherapy Compared to Cold Water Immersion: Implications for Sport and Exercise Recovery Michael Holmes, Darryn S. Willoughby

doi:10.7575/aiac.ijkss.v.4n.4p.32 URL: http://dx.doi.org/10.7575/aiac.ijkss.v.4n.4p.32

International Journal of Kinesiology & Sports Science ISSN 2202-946X Vol. 4 No. 4; October 2016 Australian International Academic Centre, Australia

Recovery following a marathon: a comparison of cold water immersion, whole body cryotherapy and a placebo control.

Wilson LJ et al.

Eur J Appl Physiol. 2018 Jan;118(1):153-163. doi: 10.1007/s00421-017-3757-z. Epub 2017 Nov 10.

Cochrane Database Syst Rev. 2015 Sep 18;(9):CD010789. doi: 10.1002/14651858.CD010789.pub2.

Whole-body cryotherapy (extreme cold air exposure) for preventing and treating muscle soreness after exercise in adults.

Costello JT, Baker PR, Minett GM, Bieuzen F, Stewart IB, Bleakley C.

Near infrared therapy (NIR-A) & soreness

Near infrared therapy bulbs around 810-830nm wavelength (look for NIR-A label) appear to increase ATP energy production in tissue-reducing inflammation, speeding up healing times of injuries, wounds, & sore muscles by penetrating up to 9 inches (23cm). A 150W NIR-A infrared bulb can be bought for $10-$21 & used with a clampable lamp to target healing anywhere on the body for 15 minute applications every three hours. Doing it too frequently appears to negate the benefits. It can be used close enough to warm the skin but without burning/overheating it. Near infrared therapy has been used by doctors and trainers for years to

apparently increase metabolism, energy, circulation, endurance, strength, recovery, flexibility and reduce body fat, inflammation, and joint & muscle pain as well as to reduce anxiety, increase mood & concentration, treat Alzheimer's & Parkinson's

Lasers Med Sci. 2016 Jul 1. [Epub ahead of print]

What is the best moment to apply phototherapy when associated to a strength training program? A randomized, double-blinded, placebo-controlled trial : Phototherapy in association to strength training.

Vanin AA et al.

J Clin Laser Med Surg. 2001 Dec;19(6):305-14.

Effect of NASA light-emitting diode irradiation on wound healing.

/Whelan HT et al.

Ger Med Sci. 2006; 4: Doc05.

PMCID: PMC2703221

Influence of water-filtered infrared-A (wIRA) on reduction of local fat and body weight by physical exercise

Frank Möckel et al.

J Appl Physiol (1985). 2006 Jul;101(1):283-8. Epub 2006 Apr 20.

Effect of low-level laser (Ga-Al-As 655 nm) on skeletal muscle fatigue induced by electrical stimulation in rats.

Lopes-Martins RA, Marcos RL, Leonardo PS, Prianti AC Jr, Muscará MN, Aimbire F, Frigo L, Iversen VV, Bjordal JM.

ABOU-HALA, Andréia Zarzour et al. Effects of the infrared lamp illumination during the process of muscle fatigue in rats. Braz. arch. biol. technol. [online]. 2007, vol.50, n.3, pp.403-407. ISSN 1678-

4324. http://dx.doi.org/10.1590/S1516-89132007000300006.

J Sports Med Phys Fitness. 2002 Dec;42(4):438-45.

Effect of linear polarized near-infrared light irradiation on flexibility of shoulder and ankle joints.

Demura S, Yamaji S, Ikemoto Y.

http://articles.mercola.com/sites/articles/archive/2017/02/26/photobiom

http://drlwilson.com/articles/SAUNALITE%20NIR%20BENEFITS.htm

THE BENEFITS OF NEAR INFRARED ENERGY by Dr. Lawrence Wilson May 2010

http://drlwilson.com/articles/sauna_therapy.htm

What else helps recovery?

Anti-inflammatory herbs

Superstrong anti-inflammatories taken with a meal may speed healing like tumeric with a little black pepper or curcumin extract, ginger, astaxanthin, boswellia, and/or MSM (crystal version of DMSO). Research shows because they speed recovery & healing by increasing stem cell activity, anti-inflammatories allow people to work out again sooner & significantly speed up strength & aerobic gains.

Food enzymes

Bromelain (in pineapples) & papain (in papaya) are also proteolytic enzymes which not only may cut workout & injury recovery time by 50-75%, but also aid in food digestion. They can be taken internally & used topically.

https://bengreenfieldfitness.com/article/recovery-articles/top-workout-recovery-techniques/

DMSO

DMSO is a great topical anti-inflammatory that also helps other topical anti-inflammatories like boswellia be absorbed into the skin. Some people don't mind but others don't like that it can make people smell like garlic. It absorbs water from the air so the cap needs to stay on the bottle as much as possible, so the roll on version may work best. I use the roll on then apply some of the other wound healing salve right after to speed absorbtion.

Topical magnesium oil

Magnesium oil may help speed muscle recovery & help the heart. It is not technically an oil but spreads like one. Using it right after DMSO application may increase absorbtion.

Foods

Dark cherries & celery both are major anti-inflammatories.

Organic extra virgin cold pressed olive oil uncooked has phenols that help recovery.

Vitamin D3 taken with a meal (fat soluble) has a strong anti-inflammatory effect.

Eating foods that have all eight essential amino acids (EAAs) and a large amount of the branched chain amino acids leucine/isoleucine/valine that are used heavily in exercise right after a workout can significantly improve strength building & muscle growth.

Deep tissue work

Ben Greenfield (BG), a heavily followed & highly respected personal trainer, says deep tissue work into fascia like Rolfing, Muscle Activation Technique, Advanced Muscle Integrative Therapy, Graston Technique, Trigger Point Therapy, deep-tissue sports massage, & foam rolling appear to significantly speed up recovery from workouts. Using any tool to dig into tight spots can loosen fascia & improve healing.

https://getkion.com/articles/body/faster-exercise-recovery/?utm_source=facebook&utm_medium=social-cpc&utm_campaign=kion-flex&utm_term=cold-traffic-12-ways-to-recover-funnel

Inversion

BG also cites inversion tables or yoga swings as a benefit for lymph circulation & recovery, including just propping the legs straight up for five minutes.

Compression garments

BG notes that compression garments used up to 24 hours after a workout may help speed recovery as well.

Acupuncture & acupressure

He notes acupuncture & acupressure appear to help recovery & pain as well.

https://bengreenfieldfitness.com/article/recovery-articles/top-workout-recovery-techniques/

Pulsed electromagnetic field (PEMF)

PEMF devices are used to double the speed of healing of bones in hospitals. PEMF devices work to reduce inflammation as well as steroids without the side effects. Earthpulse has the cheapest at $300. ICES (the creator of PEMF devices) has the smallest (uses lithium rechargeable) & most versatile (also is a TMS brain stimulator) around $600.

Superfast workout

If I am in a very large hurry & want to get in some aerobic exercise (like before a long drive), I do the 2 minute warmup, 1 minute burnout, then 2 minute warmdown. Parking garage steps are great for that in many towns, and the view is often beautiful.

For weight lifting I do seven lifts with no weight for dynamic stretching, then one superslow lift of a weight I can only do one of. I prefer not to do this except for emergencies & otherwise stick with my six fast lifts & seventh superslow because I don't want to stress my joints or wear down my cartilage. Once we've worn down out cartilage it is gone. Overstressing the knee can be very hard to heal

because it doesn't get good blood flow. So dynamic stretching & seven repetitions are important for long term health.

But some people go the other way & spend many hours per week lifting weight & exercising. Starting from the base of knowing that superslow lifts to exhaustion is the best, and burning out for 30 seconds of intense aerobic activity is the best, increasing the amount of exercise is easy. With the lifts, after doing a superslow rep on a weight we can only do one lift, it is easy to drop the weight by 5 or 10lbs & do as many superslow reps with that weight as possible, & so on.

How much exercise is safe?

Excessive high impact exercise like excessive jogging can negate the positive effects of exercise on the body. Multiple studies have shown that light & moderate jogging (less than four miles and every third day) is associated with longer life, while strenuous (more than four miles at a time or ten miles per week) jogging is associated with the same mortality as people who are sedentary.

Dose of jogging and long-term mortality: the Copenhagen City Heart Study.

J Am Coll Cardiol. 2015 Feb 10;65(5):411-9. doi: 10.1016/j.jacc.2014.11.023.

Schnohr P, O'Keefe JH, Marott JL, Lange P, Jensen GB.

20-60 min/day exercise walking min 30-40% lower chance of dying in 14yr study

http://fitness.mercola.com/sites/fitness/archive/2016/02/12/extreme-exercise-affects-heart.aspx?e_cid=20160221Z1_DNL_TFA_1&utm_source=dnl&utm_m

Short is better

Because our fast twitch/sprinter muscles can act like slow twitch endurance muscles when needed, we do far better physiologically when we sprint occasionally than when we jog longer distances more frequently. If we don't ever sprint, even if we jog for miles, our sprinting ability (fast twitch muscles) is limited. But when we sprint, our fast twitch muscles can act like slow twitch endurance muscles and improve our endurance run performance. For our overall health, in preparing for even a marathon it is far healthier to sprint hard for four miles two and a half times per week than to jog over ten miles a week. While marathon times may get better with the longer jogs, joint & cardiovascular health gets worse than for people who keep to four miles with a couple days off in between or less than 10 miles per week.

Low impact aerobic exercise-run walking

Low impact exercises may be far healthier over time than high impact exercises like jogging. Run-walking works by lifting each foot as little off the ground as possible and always keeping one foot on the ground. The workout is the same as jogging but with far less impact and wear & tear on the joints. This may help the heart & improve life longevity better than jogging does. When I do it I concentrate on touching the ground as lightly as possible.

Substitute for runner's high

For those addicted to exercise or running, taking turmeric (with a little black pepper) or curcumin with a meal is an anti-inflammatory and painkiller that has surprising long term antidepressant benefits in some and may speed recovery & stop inflammation & pain in all. The algae spirulina when eaten with a vegetable (necessary) has the EPA & DHA fatty acids shown to improve mood and concentration & reduce anxiety in fish oil. Acetyl-L-Carnitine is an amino acid that improves mood, concentration, energy & decreases anxiety, 1/4-1/2 ts per day.

Running shoes

Pronation? Impact? Shoeless? In a review of decades of shoes/running experiments, one meta-analysis found that pronation actually helps prevent injuries, unless corrected for in the shoe type. Running with minimalist shoes to strengthen the feet doesn't seem to prevent injuries. Instead what help prevent the most injuries regardless of type of foot was how comfortable they were, including with inserts. So trying on different types of shoes with different types of inserts & sticking with the combination that is the most comfortable reduced injuries the most.

Br J Sports Med doi:10.1136/bjsports-2015-095054

Review

Running shoes and running injuries: mythbusting and a proposal for two new paradigms: 'preferred movement path' and 'comfort filter'

BM Nigg, J Baltich, S Hoerzer, H Enders

Heels- performance & injuries

Running on the midfoot (middle to the ball of the foot) conserves 20% more energy than on the heel. Flat shoe or barefoot runners in marathons significantly outperform runners with elevated heels in their shoes. It's also a lot faster on a kickscooter with flat heels, for those enthusiasts (like me!).

Shoes with heels cause many times more injuries than flat shoes. Research shows that landing on the midfoot when walking & running has a lot less impact on the heel, knees, hip & back than landing on the heel, which happens when the heel is elevated. Women who wear high heels have 400% greater foot injuries. In my experience, the higher the heel the greater my discomfort. Wearing flat shoes helped me enjoy jogging for the very first time.

Ellipticals

Ellipticals may be slightly better for the joints than treadmills/walking and burn a little more calories, but don't strengthen the muscles that prevent falls.

http://well.blogs.nytimes.com/2015/08/07/walking-vs-elliptical-machine-redux/?em_pos=medium&emc=edit_hh_20150811&nl=health&nlid=26

Longevity

Using a stair machine or walking up stairs provides the best workout, burns twice as many calories as walking, strengthens the

muscles that prevent falls the most, and reverses osteoporosis and builds bone as a weight bearing exercise. The best individual exercise association with longevity is how many stairs are walked up daily.

Playing soccer may add five years (if no headers), and playing tennis may add 10 years.

Various Leisure-Time Physical Activities Associated With Widely Divergent Life Expectancies: The Copenhagen City Heart Study

Schnohr, Peter et al.

Mayo Clinic Proceedings , Volume 93 , Issue 12 , 1775 – 1785

Treadmills & bicyles

To vary the muscle groups, treadmills & bicycles can be rotated with stairs & ellipticals.

Eating for exercise

The foods peppers, onions, mustard all increase metabolism. Almost all fat makes people sleepy & slows metabolism except for MCT oil (available online), which increases metabolism. Unlike all other fat its easier to burn as energy than to store as fat. Weightlifters & other athletes use it before because it enhances performance. Coconut oil is half MCT oil.

I take a tablespoon of baking soda with water (being alkaline/base it counters lactic acid & increases endurance) and some cordyceps mushroom a half hour to two and a half hours before lifting. They

both have been shown to increase athletic performance. Baking soda appears to work by buffering the lactic acid buildup during the workout.

Carbohydrate loading

I eat one to two cups of cooked organic brown rice immediately before my workout (no cinnamon as it lowers blood sugar), then within ten minutes I get into the gym & start my workout. This gives me an incredible amount of energy for lifting, and has increased my maximums by 20-30lbs each. I have to start the workout before my blood sugar gets too high. If I wait a little too long my body kicks in with insulin cuts my energy benefit from the rice. Creatine taken an hour or two before lifting has been shown to increase strength gains in many as well. For most people creatine increases strength & mood when taken daily & has little side effects in most medical studies. People who don't eat meat may see a larger improvement in strength gains taking creatine.

If I wasn't able to eat my rice I take a banana and before each lift I take a bite of 1/4th of it & hold it in my mouth during each lift to increase my blood sugar temporarily & increase the amount I can lift. It signals the body that sugar is coming & temporarily increases the amount of sugar the body releases into the bloodstream.

After I get home I eat a couple cups of cooked beans spiced however I want. Most meat eaters don't know that rice & beans in combination contain the same three amino acids that we use up fast in exercise that make us crave meat- leucine, isoleucine, & valine. Eating proteins that have these amino acids after working out significantly increases strength building. Rice & beans are far better than meat for weightlifting because the rice eaten alone & right before lifting increases blood sugar enough to increase the amounts

that can be lifted by a lot. Meat doesn't do that.

Hand/eye coordination

All the research & field experience shows that surgeons who play video games outperform their peers & decrease mistakes & mortality during surgeries. The best race car drivers play video game simulations of their cars that they give feedback to the game designers to get the closest experience to real life in order to practice & improve their performance on the track significantly.

What that means for us is that we can play a half hour of a challenging videogame that requires excellent hand eye coordination per week to improve ourselves. The more engaging the game the better, to the limits that the person wants to play. It's no good if the game is so involving that the player ends up feeling they are wasting time playing it beyond its hand/eye coordination benefits, or doesn't care enough to really try hard. So finding the balance is important.

For people who are older & have slower reflexes playing video games can significantly increase reaction time & may save lives when driving.

Face exercises (look 3 years younger)

Look Younger Just by Doing These Face Exercises
The Cheek Lifter
The idea here is to strengthen the muscles in the cheeks—elevating droopy cheeks to more youthful heights.

1. Form a long/tall “O” shape with your mouth and fold your upper lip over your front teeth.

2. Smile to lift your cheek muscles. Place your index fingers lightly and directly on the top part of each cheek, directly under your eyes.

3. Relax your cheek muscles, allowing them to return to their original position (keep your mouth in an “O”), and then smile again to lift your cheek muscles. Visualize pushing the muscles up toward your eyes as you smile. You have just completed one “push-up.” Repeat nine more times.

4. On the final push-up, hold your cheek muscles up as high as you can. Move your index fingers an inch away from your face, and raise them to scalp level while looking at them to help you visualize your cheek muscles lifting. Continue looking up at your fingers, and hold for 20 seconds. Release and relax.

Do the entire sequence of 10 cheek lifters three times per session.

The Happy Face Lifter
This exercise strengthens the entire face and increases blood flow to the muscles of the face, neck and scalp. It’s most effective when done standing up.

1. Form a long/tall “O” with your mouth, press your lips against your teeth, then slowly fold them over your teeth. Smile to lift your cheek muscles.

2. Close your eyes, and roll your eyeballs toward your scalp. Adjust your mouth to make the “O” as small as possible. Smile again to further tighten those cheek muscles, keeping the “O” small. Slowly tilt your head slightly back.

3. Tighten your abdominal muscles and buttocks, lift your chest, and contract all your facial muscles. Keeping your eyes closed, slowly

raise your hands up and over your head as you visualize lifting every single facial muscle off your body.

4. Hold the lift tightly for 30 seconds while taking long, deep breaths. On an exhale, allow your hands and head to drop toward the floor. Slowly inhale and relax.

Do this exercise one time every morning and every evening.

Scooping
This jaw-and-neck exercise firms sagging cheeks and droopy jowls and can diminish wrinkles on the sides of the chin.

1. Open your mouth, and make an “Ahh” sound. Fold your lower lip over your lower teeth and hold tightly. Extend your lower jaw forward.

2. Using your lower jaw only, scoop up very slowly, as if you’re using your jaw to scoop up something very heavy, then repeatedly open it and scoop again. Each time you scoop, tilt your head back so that your chin rises about an inch, incrementally tilting your head farther and farther.

3. Do 10 scoops. By the final one, your face should be about parallel with the ceiling. Keep your chin extended and hold tightly for 20 seconds while visualizing the sides of your face lifting.

Repeat twice for a total of three sets.

Source: Gary Sikorski, creator of Happy Face Yoga and coauthor of a study published in JAMA Dermatology. You can buy or stream Happy Face Yoga at his website HappyFaceYoga.com. Date:August 1, 2018 Publication: Bottom Line Personal

Supplements

Here's some research on supplements that appear to be safe that may help exercise.

Creatine

Creatine appears to help improve strength if taken repeatedly for weightlifting some hours before. Some people get a great deal of benefit. People who eat vegetarian or vegan may get a greater benefit.

Creatine to Enhance Sports Performance

Dónal P. O'Mathúna, PhD

Integrative Medicine Alert

October 2000; Volume 3; 112-115

Cordyceps

Cordyceps appears to increase liver atp to improve endurance & reduce fatigue. It improves respiration, exercise, aerobic capacity, strength, & endurance.

International Journal of Medicinal Mushrooms

DOI: 10.1615/IntJMedMushr.v10.i3.30

pages 219-234

Medicinal Value of the Caterpillar Fungi Species of the Genus Cordyceps (Fr.) Link (Ascomycetes). A Review

John C. Holliday

Matt P. Cleaver

Europe PubMed Central

Effect of cordyceps sinensis and reduced glutathione on experimental mouse model with non-alcoholic fatty liver disease

(cba:646641)

Yang Zhaoxia, Dai Dongling, Shen Wei

Department of Gastroenterology, Second Affiliated Hospital of Chongqing Medical University.Chongqing 400010;China

Life Sciences

Volume 76, Issue 4, 10 December 2004, Pages 385–395

Pharmacological basis of ‘Yin-nourishing’ and ‘Yang-invigorating’ actions of Cordyceps, a Chinese tonifying herb

Kai Ming Siu, Duncan H.F. Mak, P.Y. Chiu, Michel K.T. Poon, Y. Du, Kam Ming Ko,

Enhancement of ATP generation capacity, antioxidant activity and immunomodulatory activities by Chinese Yang and Yin tonifying herbs

Kam Ming Ko* and Hoi Yan Leung

Department of Biochemistry, Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong, China

Chinese Medicine 2007, 2:3 doi:10.1186/1749-8546-2-3

Cordyceps for Improved Energy Levels and Sports Performance

Integrative Medicine Alert

March 2000; Volume 3: 28-30

Dónal P. O'Mathúna, PhD

Baking soda

Baking soda supplementation appears to help exercise and endurance, especially with higher intake levels & more intense exercise.

Effects of sodium bicarbonate ingestion on anaerobic performance: a meta-analytic review.

(PMID:8388767)

Matson LG, Tran ZV

School of Kinesiology & Physical Education, University of Northern Colorado, Greeley 80639.

International Journal of Sport Nutrition [1993, 3(1):2-28]

Sodium bicarbonate improves swimming performance.

(PMID:18004687)

Lindh AM, Peyrebrune MC, Ingham SA, Bailey DM, Folland JP

School of Sport and Exercise Sciences, Loughborough University, Loughborough, United Kingdom.

International Journal of Sports Medicine [2008, 29(6):519-523]

DOI: 10.1055/s-2007-989228

Citrulline malate

Citrulline is an amino acid that we make arginine and creatine from. The arginine opens up the blood vessels and the creatine helps gain muscle. Taking it raises arginine more than taking arginine and without the stomach problems. Malate helps activate ATP energy in the cell. The combination can be used a half hour before a workout to significantly enhance athletic performance.

?-alanine

Supplementation with ?-alanine to raise carnitine levels appears to improve high intensity exercise performance.

Sports Medicine

March 2010, Volume 40, Issue 3, pp 247-263

Muscle Carnosine Metabolism and ?-Alanine Supplementation in Relation to Exercise and Training

Dr Wim Derave, Inge Everaert, Sam Beeckman, Audrey Baguet

Nutrients 2010, 2(1), 75-98; doi:10.3390/nu2010075

Review

Effects of Beta-Alanine on Muscle Carnosine and Exercise Performance:A Review of the Current Literature

Julie Y. Culbertson, Richard B. Kreider, Mike Greenwood and Matthew Cooke

Amino Acids

June 2013, Volume 44, Issue 6, pp 1477-1491

Carnosine: from exercise performance to health

Craig Sale, Guilherme G. Artioli, Bruno Gualano, Bryan Saunders, Ruth M. Hobson, Roger C. Harris

Amino Acids

July 2010, Volume 39, Issue 2, pp 321-333

Effect of beta-alanine supplementation on muscle carnosine concentrations and exercise performance

Craig Sale, Bryan Saunders, Roger C. Harris

High Level of Skeletal Muscle Carnosine Contributes to the Latter Half of Exercise Performance during 30-s Maximal Cycle Ergometer Sprinting

Yasuhiro Suzuki, Osamu Ito, Naoki Mukai, Hideyuki Takahashi, Kaoru Takamatsu

The Japanese Journal of Physiology

Vol. 52 (2002) No. 2 P 199-205

http://doi.org/10.2170/jjphysiol.52.199

Influence of ?-alanine supplementation on skeletal muscle carnosine concentrations and high intensity cycling capacity

C. A. Hill, R. C. Harris, H. J. Kim, B. D. Harris, C. Sale, L. H. Boobis, C. K. Kim, J. A. Wise

Amino Acids

February 2007, Volume 32, Issue 2, pp 225-233

The absorption of orally supplied ?-alanine and its effect on muscle carnosine synthesis in human vastus lateralis

R. C. Harris, M. J. Tallon, M. Dunnett, L. Boobis, J. Coakley, H. J. Kim, J. L. Fallowfield, C. A. Hill, C. Sale, J. A. Wise

Amino Acids

May 2006, Volume 30, Issue 3, pp 279-289

Effects of ?-alanine supplementation on exercise performance: a meta-analysis

R. M. Hobson, B. Saunders, G. Ball, R. C. Harris, C. Sale

Amino Acids

July 2012, Volume 43, Issue 1, pp 25-37,

Important role of muscle carnosine in rowing performance

Audrey Baguet , Jan Bourgois , Lander Vanhee , Eric Achten , Wim Derave

Journal of Applied Physiology Published 1 October 2010 Vol. 109 no. 4, 1096-1101

DOI: 10.1152/japplphysiol.00141.2010

Short-duration ?-alanine supplementation increases training volume and reduces subjective feelings of fatigue in college football players

Jay R. Hoffman et al.

Nutrition Research

Volume 28, Issue 1, January 2008, Pages 31–35

?-Alanine supplementation augments muscle carnosine content and attenuates fatigue during repeated isokinetic contraction bouts in trained sprinters

Wim Derave , Mahir S. Özdemir , Roger C. Harris , Andries Pottier , Harmen Reyngoudt , Katrien Koppo , John A. Wise , Eric Achten

Journal of Applied Physiology November 2007 Vol. 103 no. 5, 1736-1743

DOI: 10.1152/japplphysiol.00397.2007

Beetroot

Beetroot juice reportedly increases stamina by 16% and in one study increased blood flow to especially fast twitch muscles by 38%.

Scott K. Ferguson, Clark. Holdsworth, Jennifer L. Wright, Alex J. Fees, Jason D. Allen, David C. Poole, et al. “Microvascular oxygen pressures in muscles comprised of different fiber types: Impact of dietary nitrate supplementation.” Journal of Nitric Oxide, Biology and Chemistry, 2 October 2014.

http://www.worldhealth.net/news/beverage-champions/

Hyaluronic Acid lubricates joints & works as intermuscular injections & orally where it improves osteoarthritis pain.

Category

1. Uncategorized

Date Created
October 2021
Author
biggs