www.alliancechiroandwellness.com Winter 2022 Edition Alliance Chiropractic & Wellness Clinic Chiropractic-Massage-Naturopathic Medicine

#### Health Newsletter

# The Best Exercises for Your Bones

Source: https://www.health.harvard.edu/



All exercises that increase bone strength have one or more of the following attributes:

**They provide resistance**. In these forms of exercise, you challenge your muscles by working against some type of resistance such as dumbbells, elastic bands, or even your own body weight. Resistance exercises, including classic strength training rely on muscle contractions that tug on bones to stimulate them to become stronger.

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**They are weight-bearing**. Weight-bearing exercise is any activity in which you carry your own body weight and work against gravity such as running, walking, dancing, hiking, climbing stairs, or playing tennis, golf, or basketball. This is in contrast to non-weight-bearing activities such as swimming or cycling, where the water or bicycle support your body weight. The force you exert

to counteract gravity when you engage in weight-bearing activities is what stimulates bones to get stronger.

**They provide impact**. When you land a jump or pound the ground with each step as you run, you multiply the weight-bearing effect of gravity. That is why higher-impact activities generally have a more pronounced effect on bone than lower-impact exercises.

**They are higher-velocity**. Impact can be increased even more as your speed increases. For example, jogging or fast-paced aerobics will do more to strengthen bone than a leisurely stroll or slow calisthenics.

**They involve sudden changes of direction**. Changing direction while you move also appears to benefit bones. When researchers reviewed bone strength in the hips of a variety of athletes, they found that those who played sports such as soccer and squash, involving rapid turns and start-and-stop actions, had bone strength similar to those who participated in high-impact sports such as triple jumpers and high jumpers—and they all had greater bone density than long-distance runners.

**They help improve your balance**. Exercises that target balance may not be the best for building bone but they will help keep you from falling, so they also serve a bone-protecting function.

Gradually scaling up resistance, impact, and speed is important in preventing injury. Older adults may need to stick with progressive resistance training and weight bearing exercise, as the risks of injury with high velocity/high impact training would be too high. Building a strong foundation of high bone density in our youth is very important in preventing osteoporosis as we age.

# **Health Humour**

**A man is waiting in the doctor's office...** When the doctor comes in and says, "There's good news and there's bad news concerning your health. Which would you like to hear first?"

"Give me the good news first." Replies the patient.

"Well, the good news is we're naming a disease after you."

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## Placebo Response in Common Treatments for Osteoarthritis

Source: https://www.bmj.com/content/370/bmj.m1668; Ann Rheum Dis2016;75:1964-70. doi:10.1136/annrheumdis-2015-208387 pmid:26882927

One of the largest meta-analyses studies on osteoarthritis included 41, 391 patients. The researchers investigated common treatment interventions for osteoarthritis to determine how much of their effect was due to placebo, a result termed the "contextual" effect. As shown in Figure 1, placebo can account for about 75% of responses to drugs commonly used in osteoarthritis.





### Figure I

Overall treatment effect and proportion attributable to contextual effect for pain in osteoarthritis. CS= chondroitin sulfate GS= glucosamine sulfate IACS= intra-articular corticosteroid IAHA= intra-articular hyaluronic acid NSAID= non-steroidal anti-inflammatory drug PEMF= pulsed electromagnetic filed therapy Adapted from Zou et al, 201631

# **COVID** Humour

My husband purchased a world map and then gave me a dart and said, "Throw this and wherever it lands—that's where I'm taking you when this pandemic ends." Turns out, we're spending two weeks behind the fridge.

Being quarantined with a talkative child is like having an insane parrot glued to your shoulder.

I never thought the comment "I wouldn't touch them with a 6-foot pole" would become a national policy, but here we are!

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## Last Call? Moderate Alcohol's Health Benefits Look Increasingly Doubtful

Source: https://www.medscape.com/; John Watson; December 22, 2021



Past research has suggested that a little bit of alcohol now and then actually has a health benefit. Yet the last couple of years have seen a notable fraying of this idea, as emerging data calls into question whether alcohol in moderation should really continue to be just what the doctor ordered.

### Alcohol's Diminishing Cardioprotective Value

Perhaps the most resonant argument for the benefits of light-to-moderate alcohol consumption, defined as one to two drinks daily, has been the proposed cardioprotective (heart health) value. In this way, alcohol differs from tobacco, considered unsafe at any level. Alcohol's proposed cardioprotective effects are often represented as a J-shaped curve, with moderate drinking occupying the sweet spot between teetotaling and heavy/binge drinking when it comes to reduced mortality from heart attack.

In reality, when studies showing a cardio-protective benefit were looked at more closely, it was apparent that people who had to stop drinking for health reasons were placed in the non-drinking group. When this group as a whole was excluded, there was no protective value related to alcohol consumption.

Another factor dimming alcohol's cardio-protective reputation comes via recent data that atrial fibrillation (abnormal heart beat) episodes can be triggered by alcohol use.

A randomized controlled trial published in the New England Journal of Medicine concluded that abstinence reduced arrhythmia recurrences in regular drinkers with atrial fibrillation.

## An Overlooked Carcinogen No Longer

Surveys indicate that less than half of Americans realize alcohol increases cancer risk. That might have changed a bit this year. In early 2021, an epidemiological analysis estimated that alcohol contributed to 4.8% of cancer cases and 3.2% of cancer deaths in the United States. In summer of 2021, *Lancet Oncology* published the results of a high-profile, population-based study on the global burden of cancer as a result of alcohol. Although the main take-away message was that 4% of new cancer cases worldwide in 2020 were attributable to alcohol, it was also noteworthy that moderate drinking accounted for 103,100 out of 741,300 of these projected annual cases.

The risk of cancer increases even with low or moderate levels of drinking. Drinking less means you will have a lower risk of cancer than if you drink heavily, but there is NO safe limit of alcohol consumption. The study linked alcohol consumption to an increased risk of at least seven different cancer types, including those of the oral cavity, pharynx, larynx, esophagus, colon, rectum, liver, and breast.

Perhaps the changing perception of alcohol's carcinogenic potential is best summed up by the American Cancer Society, who in updating their guidelines in 2020 after eight years, offered this succinct piece of advice: "It is best not to drink alcohol."

### **Neurotoxic Implications**

There has similarly been a reconsideration of the effects of moderate alcohol consumption on brain health.

A recent report of multi-modal MRI brain and cognitive testing data from over 25,000 participants in the UK indicated that alcohol may have no safe dosage. Even moderate consumption reduced gray matter volume and functional connectivity; negative associations that were increased in those with higher blood pressure and body mass index. Alcohol changes to the brain have been linked to decreased memory and dementia.

A recent study of over 1 million dementia cases in France indicated that problematic alcohol use (alcohol use disorders) were one of the strongest risk factors for dementia, more so than conditions like high blood pressure and diabetes.

As far as recommendations for alcohol, it is recommended that alcohol be considered similar to junk food: fine in small amounts but definitely not something good for us.

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## Slow Walking Speed Can Predict Frailty in Older Adults.

Source: <u>https://www.eatthis.com/news-mobility-age-study/; https://bmcprimcare.biomedcentral.com/articles/10.1186/1471-2296-14-86</u>

Frailty is often defined as a "clinically recognizable state of increased vulnerability resulting from aging-associated decline." While that definition is quite scientific, you probably have a decent idea of what frailty refers to in more real-world terms. Frail individuals are usually weak, have poor balance, and are at an increased risk of suffering a fall and being hospitalized.

Frailty is largely a geriatric condition, meaning it usually occurs in older individuals. While frailty alone is not considered a disability, it is seen as a major risk factor or in many cases a precursor, to full-blown disability and loss of day-to-day functioning and independence.

The idea of losing your ability to function on a daily basis and complete basic tasks like bathing, getting dressed, and going shopping is frightening. Most people would want to know if they were heading down a path leading to frailty and disability. Contrary to what some believe, frailty is by no means unavoidable.

Currently the diagnosis of frailty is a fairly complicated and lengthy process; physicians must assess the patient across five specific parameters: walking speed, unintentional weight loss, grip strength, physical activity levels, and exhaustion.

New research published in the *Journal of Cachexia Sarcopenia and Muscle* reports a much easier and faster way to gauge how at risk an older adult (60+) is of losing their capacity to perform basic activities of daily living years or decades later. A walking speed greater than 1.2 metres per second (m/s) suggests high life expectancy, and a prediction of good function and health. A walking speed of  $\leq 0.8$  m/s doubles the probability of a diagnosis of frailty. Study authors proposed that the first step in frailty detection should be measurement of walking speed in all persons aged 75 and over. Individuals should strive for a walking speed of 20 meters in less than 25 seconds. Once a high risk of frailty is diagnosed, early intervention can help prevent and even reverse functional decline.

Clinic Services		
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<u>Clinic Hours</u> Please note: 1. Massage therag	oy is available outside co	ore office hours.
Monday	8:00am— 12:00pm	3:30pm - 7:30pm
Tuesday	8:00am— 12:00pm	
Wednesday	8:00am— 12:00pm	3:30pm –7:30pm
Thursday		3:30pm –7:30pm
Friday	8:00am – 12:00pm	

## Announcements

- Check out our WEBSITE at www.alliancechiroandwellness.com. You can find archived issues of our newsletter as well as other clinic information. Please note appointment requests should be made by calling the office at 905-648-0661. We do not accept appointment cancellations, bookings, or reschedules via our web site. These should be done by calling the office directly.
- Just a reminder to use the hand sanitizer when you enter the office, and face masks are mandatory. Thank-you!
- We continue to operate with mandated screening, cleaning, and mask protocols in place for the protection of staff and patients.
- Like us on Facebook! To see the latest in health news, research, updates, and announcements, check us out at www.facebook.com/AllianceChiropracticandWellnessClinic

Alliance Chiropractic & Wellness Clinic

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