

Research Roundup

Research finds exercise can lower blood pressure without medication

New recommendations published in the *European Journal of Preventative Cardiology* by researchers from more than one dozen medical institutions around the world, including the University of Oxford and the University of Connecticut, revealed specific types of workouts could benefit different groups of people based on their blood pressure. This is the first research conducted to help people reduce their blood pressure.



High blood pressure, or hypertension, is defined as anything above 140/90 mmHg and more than one billion people worldwide are affected with it putting them at significant risk for cardiovascular disease and premature death. According to the researchers, people already with high blood pressure can benefit the most from aerobic training or cardio exercise. These are movements that increase heart rate and make you breathe harder while performing them such as running, swimming and cycling.

Dr. Henner Hanssen, head of preventative sports medicine at the University of Basel in Switzerland, told journalists they found these exercises can work as well or better than any one medication for treating high blood pressure.

For other blood pressure ranges, the researchers found dynamic resistance training or strength movements that incorporate multiple large muscle groups at the same time are best for people with blood pressure between 130-139/85-89 mmHg. Examples cited include body weight exercises like push-ups or air squats, as well as weight lifting movements such as front and back squats, deadlifts and presses.

People with normal blood pressure, less than 120/80 mmHg, should do planks, yoga and wall sits and other isometric resistance training that requires you to hold muscle contractions.

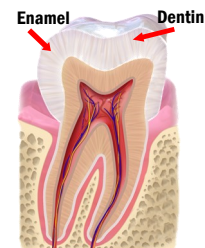
The researchers noted the exercises lowered blood pressure for about 24 hours, similar to medication, so they recommend you exercise or be active every day, if possible. They also cautioned no one should stop taking prescription blood pressure medicine and start exercising without first getting their doctor's approval.

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Dentists drill down on negative effects of drinking water with citrus

Not again. You've given up soda, caffeine and energy drinks in favor of water as a more healthful choice. But, now a report out of Australia warns about the dangers of drinking water with citrus added for a little flavor—lemon, orange, lime, or grapefruit—because the citrus can erode your tooth enamel. This applies to cold and especially hot flavored water with citrus. Hot water with citrus increases the chemical reaction causing more severe erosion.



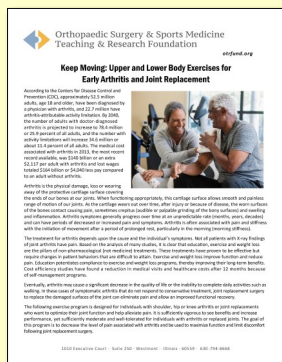
Enamel erosion is commonly caused from acid in foods and beverages. When enamel wears away, it exposes the tooth's dentin, the yellow calcified tissue layer beneath the dentin that can be sensitive if it becomes exposed and make your teeth appear indented, yellow and feel coarse against your tongue. Weak tooth enamel also creates a higher risk for cavities and other dental damage.

But don't despair. There are things you can do to limit and damage and still enjoy lemon in your water. Dentists suggest you can:

- Brush your teeth before drinking lemon water.
- Use juice from a fresh lemon rather than concentrated, commercial juices.
- Drink through a straw.
- Rinse your mouth with regular water after drinking.
- Drink cold lemon water instead of hot.

Brushing your teeth before drinking lemon water is helpful, but brushing afterwards could make the situation worse because the enamel needs time to recover. Therefore, dentists suggest waiting at least 30 minutes after drinking or eating acidic food to prevent brushing away your enamel.

OTRF releases strength, conditioning program for arthritis and joint replacements



If you have arthritis or a joint replacement, you need an exercise program specially designed to improve joint function and help alleviate pain. To address the need, Dr. Steven Chudik and his OTRF health performance team created a research-based strength and conditioning program specifically for individuals with shoulder, hip or knee arthritis, or joint replacements. To download a copy, visit <https://www.otrfund.org/programs/>. There you also will see other OTRF sport and activity-specific programs you can download.