

Celebrate Bike Month

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For more information on ways to lead a healthier lifestyle
visit our website GetHeathyCT.org



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May 2020





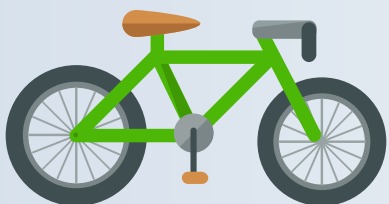
Cycling Equipment

Harvard Health Letter

You probably know that a helmet is a must for safety. The right type of clothes and bike will also make cycling safer and more comfortable.



- **Cycling clothes.** These have high-tech fibers that wick away moisture. They are usually neon-colored, with reflective material so you'll be visible to drivers. Bike shorts have a thick pad or chamois to prevent chafing and provide cushioning.



- **Bikes.** Look for one that puts less stress on your body, such as a beach cruiser or comfort bike. They have high-rise handlebars that enable you to sit upright, wide tires for a smooth ride, shock-absorbing seat posts, and low top tubes so you don't have to swing your leg too high to mount the bike (allow at least an inch or two of clearance between you and the tube). If mounting a bike is difficult, there are even "step through" bicycles that feature top tubes just six inches off the ground.



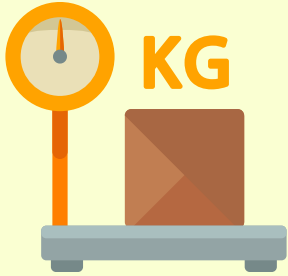
- **Other bike types include tricycles**, which are helpful if you are less stable on your feet, and recumbent bikes that allow you to lean back and ride. If you have spinal stenosis, a recumbent bike puts your spine in a flexed position and gives you pain relief. But if you have a herniated disk, the bike can make the disk bulge more.



- **Saddle.** Get one with extra padding that's wide enough to support the pair of bones you sit on. Go even further with a saddle that relieves pressure on the perineum, the area between those bones, behind the genitals. It's home to nerves and arteries that supply the lower body, and too much pressure here may cause numbness and tingling in the legs. Pressure-relieving saddles may have a "noseless" or horseshoe design.

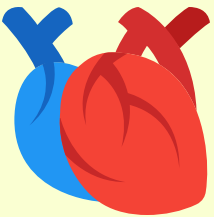
Cycling and Health Benefits

Cycling can improve both physical and mental health, and can reduce the chances of experiencing many health problems.



Obesity and weight control

Cycling is a good way to control or **reduce weight**, as it raises your metabolic rate, **builds muscle and burns body fat**. If you're trying to lose weight, cycling must be combined with a healthy eating plan. Cycling is a comfortable form of exercise and you can change the time and intensity – it can be built up slowly and varied to suit you. You should be burning at least 2,000 calories a week through exercise. Steady **cycling burns** about **300 calories per hour**. If you cycle twice a day, the calories burnt soon add up. **Half-hour** bike ride every day will **burn nearly five kilograms of fat** over a year.



Cardiovascular disease and cycling

Cardiovascular diseases include stroke, high blood pressure and heart attack. Regular **cycling stimulates and improves your heart**, lungs and circulation, reducing your risk of cardiovascular diseases. Cycling strengthens your heart muscles, **lowers resting pulse** and **reduces blood fat levels**. People who cycle to work have **two to three times** less exposure to pollution than car commuters, so their lung function is improved. Regular cycling protected people from heart disease.



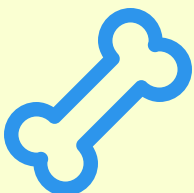
Cancer and cycling

Many researchers have studied the relationship between exercise and cancer, especially colon and breast cancer. If you cycle, the chance of **bowel cancer is reduced**. Regular cycling **reduces the risk of breast cancer**.



Diabetes and cycling

The rate of type 2 diabetes is increasing and is a serious public health concern. Lack of physical activity is one major reason why people develop this condition. People who cycled for more than **30 minutes per day** had a **40% lower risk of developing diabetes**.



Bone injuries, arthritis and cycling

Cycling **improves strength**, balance and coordination. It may also **help to prevent falls and fractures**. Riding a bike is an ideal form of exercise if you have osteoarthritis, because it is a low-impact exercise that places little stress on joints. Cycling does not specifically help osteoporosis (bone-thinning disease) because it is not a weight-bearing exercise.

Cycling For Health and Fitness

It only takes two to four hours a week to achieve a general improvement to your health. Cycling is:



Low impact – it causes less strain and injuries than most other forms of exercise.



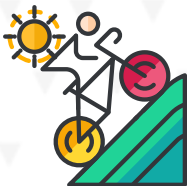
A good muscle workout – cycling uses all of the major muscle groups as you pedal.



Easy – unlike some other sports, cycling does not require high levels of physical skill. Most people know how to ride a bike and, once you learn, you don't forget.



Good for strength and stamina – cycling increases stamina, strength and aerobic fitness.



As intense as you want – cycling can be done at very low intensity to begin with, if recovering from injury or illness, but can be built up to a demanding physical workout.



A fun way to get fit – the adventure and buzz you get from coasting down hills and being outdoors means you are more likely to continue to cycle regularly, compared to other physical activities that keep you indoors or require special times or places.



Time-efficient – as a mode of transport, cycling replaces sedentary (sitting) time spent driving motor vehicles or using trams, trains or buses with healthy exercise.

.....Environmental Impact Of..... **Bicycling**

Perhaps the two greatest environmental benefits of bicycling are that it produces no pollution and consumes no fossil fuel. Annual emissions of greenhouse gases (GHG) in the U.S. are projected to increase by 35% between 2005 and 2030, from 7.2 to 9.7 billion tons CO₂ equivalent, a standardized measure of GHG emissions. The greater the number of trips made by bicycle, the slower the rate of increase.

The designation of bicycle routes helps:

Decrease CO₂ and Fuel Usage by Increasing Cycling

Increasing pedestrian and bicycling trips, with a corresponding decrease in automobile trip lengths, by as little as 1 to 3 miles on average, can have a significant effect on both emissions and fuel consumption.

Amount of CO₂ and fuel bicycling could save each year with moderate increases:

6 to 14 million tons of CO₂
700 million to 1.6 billion gallons of fuel

Utilize Existing Infrastructure Resources

Bicycles in general use very few natural or community resources; bicycle resources needed for traveling or parking place very few new demands on public spaces, including roads and highways. By establishing U.S. Bicycle Routes primarily on existing facilities, the amount of new construction and development will be minimal, causing little threat to current undeveloped areas.

80 to 90% of the U.S. Bicycle Route System will ideally utilize existing infrastructure.

Achieve Cost Savings Through Energy Conservation and Pollution Reduction

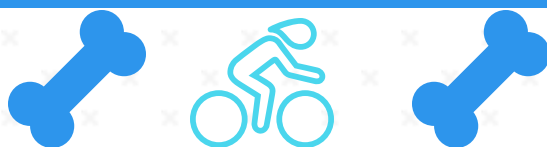
The consumption of natural resources imposes a broad but often invisible cost on society. Reducing energy and natural resource consumption and limiting the emission of damaging pollutants can help save significant public or household expenditures.

Switching from automobile to bicycle or walking trips can have significant cost savings for communities and individuals:

3-5¢ per mile in energy costs
1-12¢ per mile in air pollution costs
2-5¢ per mile in noise pollution

How Cyclists Can Avoid Weak Bones and Osteoporosis

Osteoporosis is characterized by low bone mass and deterioration of bone tissue over time.



“It has long been known that the proper type of exercise for stimulating production of osteoblasts, the cells that build bone, is weight-bearing activity and weight training. But some endurance sports, such as swimming and cycling, do not offer these specific weight-bearing benefits.

A growing body of research indicates that being fit through cycling training alone does not guarantee optimal bone density. The low impact of cycling exclusively, with no other cross-training, can increase your risk of developing low bone density. One study that compared the bone density of cyclists, runners, and weightlifters found that cyclists had lower bone density than the other two groups. Triathletes have been found to modestly increase bone mass over the season.

Cyclists should pay attention to training and nutrition strategies that maximize bone mass.”



Bone Building Tips

1. Add weight-bearing exercise such as resistance training or running to your training program year-round if you are a cyclist or swimmer.
2. Aim for at least 1,000 mg of calcium daily in foods and portions providing: 300 mg daily: milk, 8 ounces; yogurt, 8 ounces; Swiss cheese, 1 ounce 200 mg daily: cheddar cheese, 1 ounce; colby cheese, 1 ounce; mozzarella, 1 ounce; broccoli, 1 cup cooked; collard greens, 1 cup cooked; bok choy, 1 cup cooked 100 mg daily: cottage cheese, 1 cup; dried beans, 1 cup cooked; orange, 1 large.
3. If you cannot consume 1,000 mg daily from food, consider adding fortified products such as calcium-fortified orange juice. Check labels of products consumed regularly, such as recovery drinks and energy bars, for calcium content.
4. Add a calcium supplement of 500 mg daily if your food intake is not adequate or if you need higher amounts of calcium due to existing low bone mass.
5. Increase intake of food sources of vitamin D, such as fortified milk and fatty fish. Most cyclists can safely soak up 15 minutes of direct sunlight three times weekly to produce vitamin D from sunlight, but consider a supplement during the winter months or year-round. Aim for 800 IU daily.
6. A high intake of fruits and vegetables has an alkalizing effect on blood levels, as this helps to keep calcium in bone rather than increasing urine calcium losses.
7. Cigarette smoking and excess alcohol intake can negatively affect bone mass.
8. Hormone status can affect bone mass. It is established in female athletes that inadequate caloric intake can negatively affect hormone levels; more data are needed on male athletes.

Do not give your bones a break!

Our skeletons are the basis of our structure and support for our bodies. When bones become brittle and weak, this increases the ease at which they can break. When this happens, it is called osteoporosis, which actually means porous bones. You can reduce the risk with good diet and lifestyle habits. Bone growth is faster than bone breakdown until around age 30. It is important to make sure to build up your bones as much as possible while you can and keep them strong after.



According to the National Institute of Health, “in the United States, more than 53 million people either already have osteoporosis or are at high risk due to low bone mass”. Diet and activity can help ensure skeletal strength to prevent broken and painful bone. Follow these tips to keep your healthy and strong!

Increase your calcium – Bones are made up of a lot of calcium. High calcium foods can increase or help protect bone mass to reduce the risk of osteoporosis. Most adults need 1,000 mg daily but if you are over 70 years of age or a women over 50 of age, needs increase to 1,200 mg every day.

- Increase high calcium foods: low fat dairy, tofu, leafy green vegetables, whole sardines, and calcium fortified foods daily

<u>Food</u>	<u>Serving Size</u>	<u>Calcium (mg)</u>
Plain Yogurt, low fat	1 cup	448
Ricotta Cheese, part skim	½ cup	335
Sardines, canned with bones	3 ounces	324
Cow’s Milk	1 cup	300
Hard Cheese	1.5 ounces	300
West Soy® Milk	1 cup	200
Collard Greens, cooked	½ cup	179
Orange Juice, calcium fortified	½ cup	175
Kellogg’s All-Bran® cereal	½ cup	150
Baked Beans	1 cup	127
Tofu, processed with calcium	4 ounces	119
Almonds	1 ounce	80

- Check the labels:
Good sources of calcium = 10% of your necessary daily intake
Excellent sources of calcium = 20% of your necessary daily intake

Nutrition Facts	
Serving Size 1/2 cup (about 82g) Servings Per Container 8	
Amount Per Serving	
Calories 200	Calories from Fat 130
% Daily Value*	
Total Fat 14g	22%
Saturated Fat 9g	45%
Trans Fat 0g	
Cholesterol 55mg	18%
Sodium 40mg	2%
Total Carbohydrate 17g	6%
Dietary Fiber 1g	4%
Sugars 14g	
Protein 3g	
Vitamin A 10%	Vitamin C 0%
Calcium 10%	Iron 6%



Get your vitamin D – Vitamin D helps to absorb calcium and aid in bone growth. Get enough of vitamin D from a variety of ways.

- Increase high vitamin D foods: eggs, saltwater fish and vitamin D fortified foods such as milk, yogurt, some ready-to-eat cereals and certain juices
- Let your skin do it – Getting 15 minutes of sunlight on your skin may provide the recommended amount of vitamin D for the entire day.

Physically strengthen your bones – body weight and resistance training stimulates bone growth and delays their breakdown

- Try exercises such as jogging, jumping, climbing stairs, weight training machines, and weight lifting
- Use these types of exercises at least two times per week

Simple Green Smoothie																													
Ingredients <ul style="list-style-type: none">• 1 cup kale or spinach• 1 banana• 1 cup low fat milk (or Ca fortified coconut milk or almond milk)• 1 cup plain yogurt• 1 apple (cored and sliced)• 1 cup frozen fruit• flax seeds, 1 Tablespoon• chia seeds, 1 Tablespoon	Nutrition Information <table><tr><td>Serving size:</td><td>½ recipe</td></tr><tr><td>Calories:</td><td>299</td></tr><tr><td>Total fat</td><td>4 g</td></tr><tr><td>Saturated fat</td><td>2 g</td></tr><tr><td>Sodium:</td><td>156 mg</td></tr><tr><td>Total carbohydrates:</td><td>56 g</td></tr><tr><td>Dietary fiber</td><td>7 g</td></tr><tr><td>Total sugar</td><td>38 g</td></tr><tr><td>Added sugar</td><td>0 g</td></tr><tr><td>Protein</td><td>13 g</td></tr><tr><td>Vitamin D</td><td>1 mcg</td></tr><tr><td>Calcium</td><td>454 mg</td></tr><tr><td>Iron</td><td>2 mg</td></tr><tr><td>Potassium</td><td>1119 mg</td></tr></table>	Serving size:	½ recipe	Calories:	299	Total fat	4 g	Saturated fat	2 g	Sodium:	156 mg	Total carbohydrates:	56 g	Dietary fiber	7 g	Total sugar	38 g	Added sugar	0 g	Protein	13 g	Vitamin D	1 mcg	Calcium	454 mg	Iron	2 mg	Potassium	1119 mg
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Directions <ol style="list-style-type: none">1. In a blender, blend the kale/ spinach and the liquid of your choice.2. Add in the rest of the ingredients, blending after each item.3. Serve and enjoy, cold.4. Reserve the leftover smoothie in the refrigerator for later																													
https://www.choosemyplate.gov/recipes/supplemental-nutrition-assistance-program-snap/simple-green-smoothie																													

Submitted by:

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Yale-New Haven Hospital Center for Nutrition and Wellness



DICE

F I T N E S S

Number on dice represents which exercise to perform.
 Colored boxes represent number of reps or seconds (indicated by *).
 The higher the number on dice, the harder it gets!

	10	20	30	40	50	60
	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						



F I T N E S S

GAMES

Use this guide to identify which exercises go with each picture.

EXERCISE	SYMBOL
Arm Punches	
Arm Rotations	
Bicycle Crunch	
Boxer Bounce	
Burpees	
Butt Kicks	
Chest Stretch	
Crab Push-Ups	
Crunches	
Drink Water	
Half Turn Jumps	
High Kicks	

EXERCISE	SYMBOL
High Knees	
Ice Skaters	
Jog In Place	
Jump Ropes	
Jumping Jacks	
Lunges	
March In Place	
Mountain Climbers	
Plank	
Push-Ups	
Quad Stretch	
Rows	

EXERCISE	SYMBOL
Saddle Stretch	
Shuffle Taps	
Side Lunge	
Sit ups	
Skier Jumps	
Skips	
Squats	
Star Jumps	
Toe Touches	
Tricep Dips	
Tuck Jumps	
Wall Sits	

DECK OF CARDS

W O R K O U T

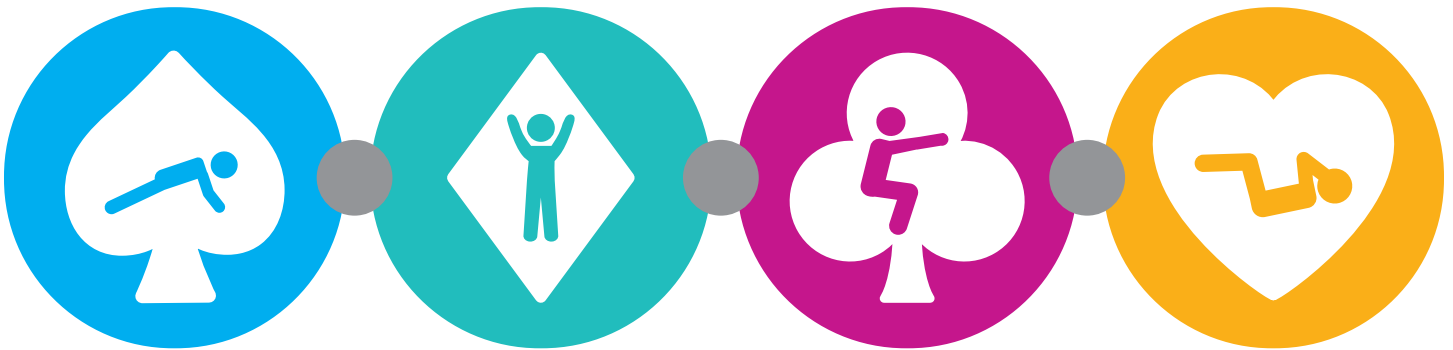
Every suit in a deck of cards represents a different exercise and the card value equals the number of reps.

PUSH-UPS

BURPEES

SQUATS

CRUNCHES



OF REPETITIONS

2-10 = # on card

Jack = 11

Queen = 12

King = 13

Ace = 14

