



SMARTER CHOICES FOR A BETTER WORLD

Consumer Reports™

REVIEWS & RATINGS

- Vacuums
- Headphones
- Popcorn
- Heating Pads
- Compact SUVs

REAL RELIEF from Back Pain

- › When to say "no" to surgery
- › New evidence about alternative medicine
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PLUS

Better Than a Hotel?

Are new home-sharing services a good deal?

Great Grills

Top picks for quality & performance at every budget

Medicine Cabinet Dangers

What to avoid

What's on your mind?



We want to know.

Our goal is a fairer, safer, and healthier marketplace for everyone.

Together we can get there faster.

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It's the easy way to have your say.

Let's start the conversation:

[cr.org/panel](https://www.consumerreports.org/panel)

CR ConsumerReports™



Real Relief From Back Pain

Learn about the nondrug therapies that work for back pain—from yoga to chiropractic—and find out how to cover the costs.

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PORSCHE 718 BOXSTER

82

OVERALL SCORE

ABOUT CONSUMER REPORTS

We are the world's largest independent, nonprofit, consumer-product-testing organization, based in Yonkers, N.Y. We survey millions of consumers about their experiences with products and services. We pay for all the products we rate. We don't

accept paid advertising. We don't accept free test samples from manufacturers. We do not allow our name or content to be used for any promotional purposes.

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RATINGS Overall scores are based on a scale of 0 to 100. We rate products using these symbols:

POOR FAIR GOOD
VERY GOOD EXCELLENT

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From the President

We Have Your Back in a Digital World

THIS MONTH Consumer Reports is bringing you expert guidance on how to treat, manage, and avoid back pain—a serious problem that affects the lives of millions of Americans. But at CR our mission is about more than just equipping you to take on those challenges that you can palpably feel and see. In an era when so many of the most common products we use—from thermostats and baby monitors to televisions and cars—are internet-connected, a new breed of threats to your security, privacy, and well-being has emerged. These threats can take the form of newsworthy hacks and breaches. But more often than not they show up in subtle ways, such as when our personal data is collected and used to possibly charge us more for things like airline tickets and shoes based on everything from our browsing habits to our occupations.

That's why we recently announced that we are embarking on an ambitious effort to empower you to make informed decisions about connected products in



the digital age. As a first step we've partnered with leading cybersecurity experts to jointly and openly develop a way to evaluate security and privacy risks in products. We hope to be able to test and rate just how responsibly products such as cell phones, "smart" refrigerators, and all other sorts of connected devices engage with your personal data. As technology continues to evolve, CR is committed to working with you to deliver peace of mind and build a digital world that consumers everywhere can trust.

Marta Tellado

Marta L. Tellado,
President and CEO
 Follow me on Twitter
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WE NEED YOUR FEEDBACK!

OUR SPRING SURVEY will be landing in your email inbox soon. We'll be asking about your experiences with cars, kitchen appliances, snow blowers, electronics stores, and more. Don't miss this opportunity to contribute to the ratings and reliability

charts that are in every issue of Consumer Reports magazine and online at [CR.org](https://www.consumerreports.org)—helping millions of consumers just like you to make better decisions about the cars you drive, the products you purchase, and the stores you shop at.



The Road Ahead

Along with our new car ratings, reliability reports, and expert insights that CR subscribers have come to expect from our Annual Auto Issue, this year we featured an investigation into autonomous vehicles and articles on tire safety and the SUV revolution. Readers responded with strong opinions and pointed questions on these and other automotive concerns.

KUDOS FOR GETTING out front on this huge social-change issue around the safety, ethics, and legalities of self-piloting vehicles. However, I was surprised your assessment did not include the ever-increasing digital threat of hacking. It seems completely naive to me that we will gleefully run headfirst into this futuristic direction having lost sight of the latest corporate or systemic hack.

—Alan Lekan, Boulder, CO

IN “DRIVING INTO THE FUTURE” you write: “We don’t think humans should be used as test

subjects.” I agree, but I’d go a step further: Privately owned cars shouldn’t be used as test vehicles by manufacturers without the owners’ consent. Specifically, once I’ve bought the car, it shouldn’t be reporting information back to its former owner without my permission. If the manufacturer values that information, it should offer to pay me for it, and I should have the option of refusing if I don’t like its offer.

—Henry Spencer, Toronto

EDITOR’S NOTE We agree with you both. Consumer Reports is part of an ambitious, collaborative effort to put consumers’ data security and privacy needs first. For more information, go to thedigitalstandard.org.

READING YOUR PIECE on self-driving cars, I thought of the problem of [modern]

supersonic jet fighters. Only microsecond management can keep the planes stable, and it must be done by computer because no human pilot can react fast enough. Now picture five lanes of bumper-to-bumper self-driving cars flowing at 75 mph, and me in the center lane driving my 2015 Honda with my 70-year-old reflexes. Autonomous cars will have to slow when I slow and yield when I want to change lanes. I will be able to drive as if I am the only car on the road, with thousands of others adjusting instantly to my every whim.

—Robert Bourque, Readfield, ME

I LIVE IN north-central Wisconsin. What is a self-driving car going to do when I approach an intersection where I have to stop with slick wet ice under 1 inch of

snow? Or on an overpass on the interstate that has black ice covering it? Ideal Southern California parameters are one thing; snow/sleet/ice conditions are completely different. Human instincts and reactions should never ever be engineered out of vehicles.


—Thomas Mudrovich, via CR.org

EDITOR’S NOTE You make an excellent point, and the plan is that both of these challenges can be addressed by the development of vehicle-to-vehicle and vehicle-to-infrastructure communications. V2V enables each vehicle to communicate with others nearby so that they can work together. With V2I, weather and road conditions will be communicated, either by vehicles or in-road sensors, to a central command center, which will then notify other vehicles of the frozen section of road.

SUV Savvy

I HAVE TO TAKE exception to your portrayal of SUVs in your “Evolution of the SUV” story. You state that the Willys MB started it all in 1941. I guess you’re not aware that Chevrolet began production of its all-steel “carryall-suburban” in 1935. In fact, the Chevrolet Suburban is the longest continuous-use automobile nameplate in production. Your idea of what an SUV has become is also off the mark. Thanks to CR and car magazines describing large SUVs like the Suburban and Ford Expedition as “trucklike” and offering “rough rides,” automakers are building smaller SUVs based on car frames. The result, which you correctly note in your story, is that “small SUVs are basically tall-roof versions of compact cars.” Stop bashing big SUVs for being trucklike! There are reasons some people prefer large SUVs built on truck frames, including durability, carrying capacity, off-road capability, and safety.

—Alex Woodie, Valley Center, CA

 Go to CR.org/lettertoeditor to share your comments for publication.

WRITE

EDITOR'S NOTE We chose the Willys because it was the first to have four-wheel drive. Historically, SUVs had trucklike ride qualities, but today we report that even the largest ones, such as the Chevrolet Suburban and Ford Expedition, ride pretty well.

THE ANNUAL AUTO ISSUE is always great and extremely thorough. However, I've been disappointed with the lack of mention about rear visibility in medium and small SUVs. The high back and rear side windows are design flaws driven by style and—coupled with high rear-seat headrests and small, stylish side mirrors—make freeway lane changing to the right a dicey proposition at best. You gave visibility a passing mention in your write-up on the Subaru Forester, but I think your readers would be better served if you focused as much on better visibility through design changes as you do discussing all the technology being served to us by the automakers.

—Eugene Sandvig, East Troy, WI

EDITOR'S NOTE Trends in cars and SUVs have led to an ongoing deterioration in visibility.

This is reflected in our road-test visibility scores, and we regularly discuss the problem with manufacturers. Standard backup cameras (mandated for any vehicle built after May 2018) are assist devices to help address this.

Rating Reversal

I WAS HAPPY, as always, to receive your 2017 Annual Auto Issue. One thing troubles me, though. Your "10 Top Picks" includes the Audi Q7 and gives it a top reliability rating. This same magazine lists the 2015 Audi Q7 as one of your "Worst Used Cars." There was no 2016 model. How can a car that was one of your worst change into one of your best in its very next model year? Given the car's price, that's my \$64,000 question.

—Dianne Ferrans, Huntsville, AL

EDITOR'S NOTE The 2015 Q7 is built on a different platform from the redesigned 2017 model. We received sufficient data from owners of the new Q7 to allow us to make a reliability prediction.

Domestic Disturbance

IN APRIL'S "Best New Cars Under \$30,000" section, 79 percent of these cars were imports. In the "Most and Least Reliable" section, a disappointing 66 percent of the least reliable were domestic and a staggering 91 percent of the most reliable were imports. I get hassled pretty regularly about "buying American" from my friends and family because we own a Toyota Camry and a Lexus RX 450h. Reliability is a huge factor for me, and I have had some very costly lessons from "American made" vehicles in the past. I love the look of the new Chevrolet Malibu and Impala. I like the style of the Ford Fusion and have often considered the SE hybrid. There have been times that I stopped and stared at a Chrysler 300, appreciating its lines. Nevertheless, I never bring myself to buy any of them because I ultimately worry

The automotive market is global, and the lines are blurred between what is and isn't "American."

—Editor's Note

about costly repairs. Please tell the American automobile manufacturers that there are many of us out there who would love to buy their cars but just can't pull the trigger due to reliability concerns.

—Michael Mize, Dallas, GA

EDITOR'S NOTE The automotive market is global, and the lines are blurred between what is and isn't "American." Is the Honda Accord, built in Marysville, Ohio, American? The Toyota Camry you own is built in Kentucky. In the end, the reliability of a vehicle is based on a variety of factors, including its build process and the quality of the parts it sources from suppliers. Almost every manufacturer, regardless of where it is headquartered, builds both reliable and unreliable vehicles.

Ready for Its Close-Up

SINCE I AM actively in the market for a new compact SUV, I was quite happy to see one featured on the cover of the April Auto Issue. But that rapidly turned to disappointment when I discovered that you didn't include it in the compact-SUV ratings on page 46, and have no test results elsewhere in the issue or on your website.

Perhaps that qualifies as a submission for your inside-back-cover Selling It feature.

—Ken Hayward, Ottawa, ON

EDITOR'S NOTE The 2017 Honda CR-V was featured on our April cover as an exemplar of the small-SUV movement, prominently covered in the same issue. The car was fresh from the factory, and we did not have time to complete testing before we went to press, but we noted in "About the Cover" on page 3 that full ratings would soon be available. We're happy to report that you'll find a Road Report on the CR-V on page 59 of this issue and ratings on page 60.

Tread Carefully

IN "WHERE THE RUBBER Meets the Road" you caution readers to replace their tires due to treadwear. But what about old age? I have a 2006 truck with 13,000 miles on it. There's not much wear on the tires. Do I need to change them?

—John Smaldino, Via CR.org

EDITOR'S NOTE Yes. Rubber can degrade over time, making tires without much wear unsafe to drive on. Refer to your owner's manual for a recommendation on how long to leave tires on the car. If there is none, follow the advice of the tire manufacturer. (Michelin, for instance, recommends having tires inspected at least once per year after five years and replacing them after 10 years from the date of manufacture.) And don't make the mistake of thinking that your tire is newly made when you buy it: Tires can sit in warehouses for months or longer before being sold. How can you tell a tire's age? Every one has a Department of Transportation number following the letters on the sidewall. The last four digits determine the week and year the tire was made (for example, "2217" would signify that the tire was made during the 22nd week of 2017). When shopping for tires, don't buy any that are more than a couple of years old.

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A Winning Power Play

IN A VICTORY for consumers in Florida, utility company Gulf Power recently agreed to rescind its proposal to raise fixed monthly charges from \$18 to \$48, a whopping 155 percent increase.

In January, Consumers Union, the policy and mobilization arm of CR, joined a diverse coalition of concerned stakeholders from across the political spectrum to call on the Florida Public Service Commission to reject Gulf Power's proposal. We presented testimony and a petition signed by nearly 1,000 consumers opposing the increase.

In the end, the pressure was too great for Gulf Power to move ahead with its unfair and unjustifiable plan.

"The proposal would have taken away control from customers trying to save money by conserving energy, requiring them to pay nearly \$50 up front every month even before they turned on a light switch," says Shannon Baker-Branstetter, policy counsel for Consumers Union.

This decision is further affirmation that when informed

consumers join together, we can make a difference that benefits everyone.

A Fast-Food Victory

KENTUCKY FRIED CHICKEN announced in April that by the end of 2018 it will stop serving chicken raised with antibiotics important to human health. That change is vital because the overuse of those drugs has contributed to the rise of "superbugs," bacteria resistant to multiple antibiotics.

For years, CR has been pressing restaurant chains to stop relying on meat suppliers that overuse antibiotics, a practice that's triggering bacteria to evolve.

"Antibiotics should not be wasted on healthy livestock to make them grow faster or to compensate for crowded and unsanitary farms," said Jean Halloran, our director of food policy initiatives. "KFC's decision is chicken done right."

In our December 2016 column, we highlighted a joint investigation by several health and environmental organizations—including CR—into the antibiotic practices of

fast-food chains. We graded the antibiotic practices of the top 25 chains and, at the time, KFC earned an F and only nine chains received passing grades.

To find out more about the overuse of antibiotics, go to CR.org/superbugs.

The Danger in Hair Dye

CONSUMERS UNION and a coalition of consumer and public health advocates recently filed a petition asking the Food and Drug Administration to consider removing its approval of lead acetate in hair dyes. This active ingredient in certain dyes is a neurotoxin and anticipated carcinogen.

The FDA approved lead acetate as a repeated-use hair dye in 1980, finding that the available scientific data didn't show a significant increase in blood levels of lead. Our petition cites newer research showing lead contamination from the hair dye, especially on surfaces that touch treated hair (dryers, combs, and faucets).

The agency is required to respond to the petition and will have to make a final decision within 180 days.

A New Privacy Standard

CR HAS LAUNCHED an ambitious, collaborative effort to shape the digital marketplace in a way that puts consumers' data security and privacy needs first.

Over the years, we've reported on the challenges facing consumers in the digital age—including identity theft and unprecedented data collection and profiteering. Today, we see an ever-growing number of internet-connected devices and services, from baby monitors to thermostats, security cameras to health-and-fitness apps, and even cars.

Though the pace of new technologies is exciting and brings greater convenience to our lives, it also carries with it new threats to our security and personal privacy. These concerns are fueled by news reports of incidents such as Chrysler's recall of 1.4 million vehicles that could be remotely hacked online.

That's why CR is working with leading privacy and cybersecurity partners to develop a standard to hold companies accountable when building and designing digital products and software. The standard will be used by CR and others to evaluate and rate products—which will help consumers make more informed purchasing decisions. The goal is to help people understand which products do the most to protect their privacy and security, and give them the most control over their personal information.

We are encouraging the participation of policy experts, businesses, academics, hobbyists, and anyone else who cares about data security to contribute their feedback on an open and collaborative site at thedigitalstandard.org.

You can find more details on this initiative and others at CR.org/issuesthatmatter.

Product Updates

The latest ratings from our labs

YOU BOUGHT A NEW VACUUM.
DID YOU KEEP THE OLD ONE?

45%

YES
it's still
in use



28%

NO
it broke

13%

NO
too many
problems

14%

NO
wanted
new one

Source: Consumer Reports 2016 Vacuums Reliability Survey.

Vacuum Packed

Two or more vacuums are better than one, especially if your home has more than one level and type of flooring.

by Daniel DiClerico



From left to right:

KENMORE
22614
\$350

68

OVERALL
SCORE

MIELE
DYNAMIC
U1 TWIST
\$450

72

OVERALL
SCORE

➤ **THE IDEA** that a single vacuum can pick up every mess has been relegated to the dustbin. Homes built today are more than 500 square feet larger than those built in the 1980s. That's a lot of extra floor space to collect dirt, debris, dander, and the detritus of modern life. No wonder so many homeowners own more than one vacuum. In fact, 43 percent of consumers own two or three vacuums, according to the latest industry data.

Yet despite this arsenal, Consumer Reports' latest vacuum survey reveals that less than half of our readers are fully satisfied with how their cleaning machines perform. Part of the problem may be that they have the wrong tool for the job: You don't need a classic Kirby to suction up scattered Cheerios, and using a hand vac on carpeting is like using a fork to rake leaves.

"There's no vacuum that does it all," says Frank Rizzi, CR's vacuum test engineer. "The heavy uprights may be great on carpet, but using the attachments to clean the stairs can be awkward." To help, we asked Rizzi and crew to play matchmaker, assembling a dream duo of vacuums for you.

To make good use of the chart at right, identify your home type, then factor in your flooring (carpeting, solid surface, or mixed).



MAKE IT BETTER

Put a lid on vacuum noise

THOUGH WE HAVEN'T gone so far as to recommend hearing protection when you vacuum, most machines are so noisy that you can't hear the phone or doorbell ring.

We've heard from industry sources that consumers associate noise with power. But in our tests, we've found capable vacuums, like Miele's, that get the job done at a lower volume. Vacuums can be made quieter by adding insulation and reducing motor vibration, but that may add to the cost. We'd like to challenge manufacturers to bring it down a notch.

Perfect Pairings

Having the right vacuum can take the drudgery out of a dirty job. Here are some handpicked duos that tidied up in our tests.



One-level

PRIMARY DEVICE

Upright vacuum, the most common type, available in bagless or bagged models.

SECONDARY DEVICE

Hand vacuum, suitable for occasional small spills.

Mixed surfaces



MIELE DYNAMIC U1 CAT & DOG

\$650

72 OVERALL SCORE

Delivers superb cleaning on carpets, bare floors, and pet hair, and keeps it all very well contained, according to our emissions test.

SHARK PET PERFECT II SV780

\$60

79 OVERALL SCORE

Great on bare floors and edges and better than most on carpet.

Mostly hard surfaces



KENMORE PET FRIENDLY 31140

\$200

71 OVERALL SCORE

Bare floors and pet hair, beware: great airflow and low emissions.

EUREKA EASY CLEAN 71B

\$50

71 OVERALL SCORE

Aced bare-floor and edge cleaning and held its own on pet hair.

Mostly rugs & carpets



MIELE DYNAMIC U1 TWIST

\$450

72 OVERALL SCORE

Aced carpet and pet-hair tests and has low emissions.

BISSELL PET HAIR ERASER 33A1

\$35

65 OVERALL SCORE

Despite its name, choked on pet hair but a good choice for quick carpet cleanups.

Two-level



PRIMARY DEVICE

Uprights are still best, but pick a lighter model to carry up and down stairs.

**SHARK NAVIGATOR
POWERED LIFT-AWAY
NV586 (TARGET)**

\$300

70 OVERALL
SCORE

Better on bare floors and pet hair than on carpets, and lightweight. Converts to portable mode with the touch of a button.

**HOOVER WINDTUNNEL
T-SERIES REWIND
BAGLESS UH70120**

\$130

69 OVERALL
SCORE

This bagless upright is superb on bare surfaces and rabid at pet-hair removal, and keeps emissions low.

MIELE DYNAMIC U1 JAZZ

\$550

69 OVERALL
SCORE

At 22 pounds, this Miele is a bit on the hefty side, but that translates into exceptional deep cleaning on carpets, including those covered in pet hair.

SECONDARY DEVICE

Add a stick vacuum for daily surface cleaning in high-traffic areas.

DYSON V8 ABSOLUTE

\$600

93 OVERALL
SCORE

Dyson's latest battery vacuum delivers superb cleaning on carpets and floors, plus it's loaded with accessories. But it costs twice as much as many primary vacuums.

**SHARK ROCKET
COMPLETE HV380**

\$240

90 OVERALL
SCORE

Excellent overall, this corded stick vacuum features a dual-brush roll, which helped it excel on bare-floor, carpet, and pet-hair tests.

BISSELL AIR RAM 1984

\$200

91 OVERALL
SCORE

This battery-powered vacuum is a beast on carpets, and it's better than other top-scoring models at containing all the dust it sucks up.

Multilevel



PRIMARY DEVICE

A canister vacuum is ideal for cleaning stairs and carrying from one level to another.

MIELE COMPLETE C3 MARIN

\$1,100

75 OVERALL
SCORE

Superb cleaning across all flooring, including carpets matted with pet hair. Suction control lets you clean drapes without harming them. Brush on/off switch for carpets to bare floors.

**KENMORE
PROGRESSIVE 21614**

\$300

70 OVERALL
SCORE

This bagged Kenmore delivers admirable performance, as long as you don't have to clean a lot of carpet.

KENMORE 22614

\$350

68 OVERALL
SCORE

This bagless model rode solid carpet cleaning to the top of the category, and the manual height adjustment helps match the brush to the surface.

SECONDARY DEVICE

Add a robotic vacuum for daily surface cleaning in the main living areas.

ROOMBA 880

\$600

87 OVERALL
SCORE

With capable cleaning on carpets and floors, this little sucker excelled at navigating around furniture and other obstacles. A smart choice for larger homes with complicated floor plans.

**ICLEBO ARTE
YCR-M05**

\$450

86 OVERALL
SCORE

This robotic holds its own with models costing hundreds more, especially when it comes to our bare-floor tests.

**SAMSUNG POWERBOT
SR20H9051 SERIES**

\$1,000

89 OVERALL
SCORE

This top-rated robotic was able to suck embedded pet hair and fine grains of sand from carpet.

Ratings ➤ **Carpetbaggers** Start with superb cleaning, then filter further by other attributes that matter to you most.

			Brand & Model	Price	Overall Score	Test Results								Features		
	Rec.	Rank				Carpet	Bare Floors	Tool	Airflow	Noise	Emissions	Handling	Pet Hair	Weight (Lb.)	Manual-Pile Adjust	Suction Control
UPRIGHT VACUUMS			BAGGED													
Uprights offer a wide cleaning swath and are generally the best choice for deep-cleaning carpets, particularly bagged uprights. Uprights tend to cost less than canister vacuums, and most are relatively easy to store. But they can be heavy—some of our top performers weigh 20 pounds or more—and pushing and pulling one can be a real chore.	✓	1	Kenmore Elite Pet Friendly 31150	\$350	74	↑	↑	↑	↑	↑	↑	↑	↑	21	•	•
	✓	2	Miele Dynamic U1 Twist	\$450	72	↑	↑	↑	↑	↑	↑	↑	↑	22		•
	✓	3	Miele Dynamic U1 Cat & Dog	\$650	72	↑	↑	↑	↑	↑	↑	↑	↑	22		•
	\$	4	Kenmore Pet Friendly 31140	\$200	71	↑	↑	↑	↑	↑	↑	↑	↑	20	•	•
	\$	5	Kenmore Progressive 31069	\$200	71	↑	↑	↑	↑	↑	↑	↑	↑	19	•	•
	\$	6	Hoover WindTunnel Max UH30600	\$180	70	↑	↑	↑	↑	↑	↑	↑	↑	17	•	
	✓	7	Kirby Avalir	\$1,600	69	↑	↑	↑	↓	↑	↓	↑	↑	23	•	•
	✓	8	Miele Dynamic U1 Jazz	\$550	69	↑	↑	↑	↑	↑	↑	↑	↑	22		•
	✓	9	Hoover WindTunnel Anniversary U6485-900	\$230	67	↑	↑	↑	↓	↑	↑	↓	↓	21	•	
	✓	10	Sebo Felix Premium	\$600	66	↑	↑	↑	↑	↑	↑	↑	↑	16	•	•
	✓	11	Hoover WindTunnel T-Series Pet UH30310	\$150	65	↑	↑	↑	↑	↑	↑	↑	↑	17	•	
	✓	12	Hoover WindTunnel T-Series UH30300	\$140	65	↑	↑	↑	↑	↑	↑	↑	↑	16	•	
	✓	13	Miele Dynamic U1 AutoEco	\$750	65	↑	↑	↑	↑	↑	↑	↑	↑	22		•
			BAGLESS													
	✓	1	Shark Navigator Powered Lift-Away NV586 (Target)	\$300	70	↑	↑	↑	↑	↑	↑	↑	↑	16		•
	\$	2	Hoover WindTunnel T-Series Rewind Bagless UH70120	\$130	69	↑	↑	↑	↑	↑	↑	↑	↑	18	•	
	✓	3	Shark Rotator Powered Lift-Away XL Capacity NV755	\$400	67	↑	↑	↑	↑	↑	↑	↑	↑	18		•
	✓	4	Shark Rotator Powered Lift-Away Speed NV680	\$260	65	↑	↑	↑	↑	↑	↑	↑	↑	14		•
	✓	5	Shark Rotator Professional Lift-Away NV501	\$260	65	↑	↑	↑	↑	↑	↑	↑	↓	17		•
	✓	6	Shark Rotator Powered Lift-Away NV650	\$300	63	↑	↑	↑	↑	↑	↑	↑	↑	17		•
	✓	7	Dyson Cinetic Big Ball Animal	\$600	63	↑	↑	↑	↑	↑	↑	↑	↓	19		
	✓	8	Dyson Cinetic Big Ball Animal + Allergy	\$700	63	↑	↑	↑	↑	↑	↑	↑	↓	19		
	✓	9	Shark Navigator Lift-Away NV352	\$200	63	↑	↑	↑	↑	↑	↑	↑	↓	14		•
CANISTER VACUUMS			BAGGED													
Canisters do better than uprights at cleaning bare floors, stairs, drapes, upholstery, and under furniture. Some are almost as good as uprights at cleaning carpets. They seem lighter because the weight is split between the canister and powerhead, but overall these vacs are bulkier than uprights, and the hose and wand make a canister harder to squeeze into a closet.	✓	1	Miele Complete C3 Marin	\$1,100	75	↑	↑	↑	↑	↑	↑	↑	↑	23	•	•
	✓	2	Kenmore Elite Pet Friendly CrossOver 21814	\$500	74	↑	↑	↑	↑	↑	↑	↓	↑	26	•	•
	✓	3	Kenmore Elite Pet Friendly UltraPlush 81714	\$400	73	↑	↑	↑	↑	↑	↑	↑	↑	25	•	•
	✓	4	Kenmore Progressive 21714	\$400	72	↑	↑	↑	↑	↑	↑	↑	↑	24	•	•
		5	Kenmore Pop-N-Go 81614	\$300	71	↑	↑	↑	↑	↑	↑	↑	↑	23	•	•
	\$	6	Kenmore Progressive 21614	\$300	70	↑	↑	↑	↑	↑	↑	↑	↑	23	•	•
	\$	7	Kenmore Progressive 21514	\$250	68	↑	↑	↑	↑	↑	↑	↑	↑	23	•	•
			BAGLESS													
	\$	1	Kenmore 22614	\$350	68	↑	↑	↑	↑	↑	↑	↓	↑	23	•	•

			Brand & Model	Price	Overall Score	Test Results					Features		
	Rec.	Rank				Carpet	Bare Floors	Edges	Noise	Pet Hair	Run Time (Min.)	Emissions	Weight (Lb.)

STICK VACUUMS

Resembling slimmed-downed uprights, stick vacuums are lightweight and convenient—great for quick cleanups. They lack the power of full-sized vacuums, which is why our experts consider them to be secondary machines. As a result, we don't subject sticks to the same deep-carpet cleaning tests as full-sized vacuums, and that means their overall scores can't be compared against the other categories.

✓	1	Dyson V8 Absolute	\$600	93	✓	✓	✓	✓	✓	✓	21	•	6
✓	2	Bissell Air Ram 1984	\$200	91	✓	✓	✓	✓	✓	✓	47	•	8
✓	3	Shark Rocket Complete HV380	\$240	90	✓	✓	✓	✓	✓	✓	Corded Model		10
✓	4	Shark Rocket DeluxePro TruePet HV322	\$230	78	✓	✓	✓	✓	✓	✓	Corded Model	•	9
✓	5	Black+Decker Smartech HSVJ520JMBF27	\$200	77	✓	✓	✓	✓	✓	✓	20	•	6
✓	6	Dyson V6 Cord-Free	\$300	77	✓	✓	✓	✓	✓	✓	7.0		5
✓	7	Electrolux UltraPower Studio EL3020A	\$300	76	✓	✓	✓	✓	✓	✓	21	•	6
\$	8	Bissell Trilogy 1683	\$130	75	✓	✓	✓	✓	✓	✓	Corded Model		9
\$	9	Kenmore 10341	\$150	74	✓	✓	✓	✓	✓	✓	16	•	6
✓	10	Miele Swing H1 QuickStep*	\$200	74	✓	✓	✓	✓	✓	✓	Corded Model	•	11
✓	11	Shark Rocket Powerhead AH452	\$170	72	✓	✓	✓	✓	✓	✓	Corded Model		11
✓	12	Shark Rocket HV302	\$180	72	✓	✓	✓	✓	✓	✓	Corded Model		9
✓	13	Dirt Devil Accucharge BD20035RED	\$70	66	✓	✓	✓	✓	✓	✓	21	•	6
✓	14	Kenmore 10340	\$100	65	✓	✓	✓	✓	✓	✓	15	•	5

HANDHELD VACUUMS

These are handy for light, quick cleaning on bare floors, short-pile carpets, and the inside of your car. Some can handle pet hair on carpet.

✓	1	Shark Pet Perfect II SV780	\$60	79	✓	✓	✓	✓	✓	✓	18.5	•	4
✓	2	Eureka Easy Clean 71B	\$50	71	✓	✓	✓	✓	✓	✓	Corded Model		6
✓	3	Bissell Pet Hair Eraser 33A1*	\$35	65	✓	✓	✓	✓	✓	✓	Corded Model		4

			Brand & Model	Price	Overall Score	Test Results					Features		
	Rec.	Rank				Carpet	Bare Floors	Ease of Use	Navigation	Noise	Pattern	Clearance (In.)	Tested Run Time (Min.)

ROBOTIC VACUUMS

No robotic vacuum can match the deep cleaning you'll get from the best uprights and canisters, but they're definitely a timesaver. In uncluttered rooms, a robotic can be used for touch-ups between manual vacuuming sessions. Better for bare floors than for carpet.

✓	1	Samsung Powerbot SR20H9051 Series	\$1,000	89	✓	✓	✓	✓	✓	✓	Repeating Grid	5.5	99
✓	2	Roomba 880	\$600	87	✓	✓	✓	✓	✓	✓	Random	4.0	57
\$	3	iCleo Arte YCR-M05	\$450	86	✓	✓	✓	✓	✓	✓	Grid & Random	3.5	119
✓	4	Roomba 980	\$900	79	✓	✓	✓	✓	✓	✓	Grid	4	19
✓	5	Ecovacs Deebot D79	\$800	76	✓	✓	✓	✓	✓	✓	Random	4	105

For the complete list of more than 170 vacuums ratings, CRO subscribers can go to [CR.org/vacuums0617](https://www.cro.org/vacuums0617).

HOW WE TEST: In our tests of full-sized vacuums, we calculate Overall Score by assessing cleaning, airflow, handling, noise, and emissions. In our cleaning tests, we lift embedded talc and sand from medium-pile carpet and suck up

sand from bare floors. For pet hair, we measure how much embedded cat fur is removed from medium-pile carpet. We use fine wood flour to see whether tools and attachments can maintain airflow and also to

gauge emissions—how much dust the vacuum spews back into the air. Noise is evaluated with a decibel meter. Handling is ease of pushing, pulling, and carrying. Weight includes the vacuum with any onboard tools.

Top Dogs in Our Pet-Hair Tests

AS FAR AS we know there's no vacuum called the Golden Retriever Fur Reliever, but there are a lot of vacuums that make fuzzy claims and use "pet" in the model name. Do they work?

Well, some are capable vacuums overall, but others are good at pet-hair pickup and little else. To test such claims, CR devised a very tough pet-hair test.

First, we take long, feathery fur from Maine coon cats and strew, stomp, and smash it into medium-pile carpet. Then we make multiple passes with the test vacuum to see how much of the hair it picks up. Vacuums that score Excellent on this test keep the fur from flying. Average vacs leave behind visible patches or fur becomes tangled in the brush.

Here are some of the champs in our tests:

- **Uprights.** The *Miele Dynamic U1 Twist* and *Miele Dynamic U1 Cat & Dog* top the list, but many others are also excellent.
 - **Canisters.** The *Miele Complete C3 Marin* makes no pet-hair claims but edged out the *Kenmore Elite Pet Friendly CrossOver 21814*.
 - **Stick vacuums.** Every Shark and Dyson in our tests got excellent marks for light pet hair.
 - **Handheld.** Our top handheld, the *Shark Pet Perfect II SV780*, is good but not great.
- PET PEEVE** Our testers have another tip for pet owners: Consider a bagged vacuum over a bagless model, because every time you empty a bagless bin, pet hairs go flying.

What Makes Consumers Fall in Love

NORMALLY YOU WOULD expect consumer satisfaction with a vacuum brand to go down as breakage rates go up. But when more than 33,000 of our readers told us about their vacuums, that wasn't always the case. Sure, they were happy with their Shark and Kirby uprights, which in our survey make the more reliable uprights. But when it came to Miele uprights, that logic didn't track.

Although the Miele's were more prone to breaking than several other brands

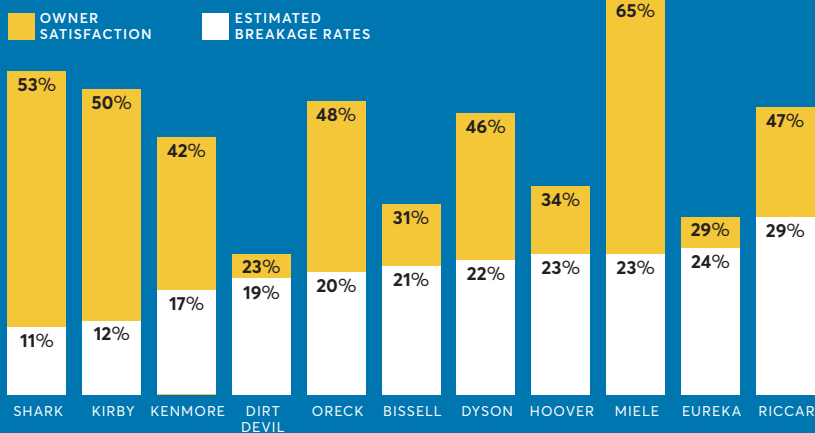
of uprights, complete satisfaction rates soared to 65 percent, considerably higher than any other brand of upright. "We will never even consider another brand," a typical owner of a Miele upright told us.

We asked our survey team for an explanation. They found that Miele owners' satisfaction seems to be far less affected even when problems occur. "Miele performance is so good that even if people experience a problem, they

are still highly satisfied," explains Steven Witten, CR's director of Survey Research. "And those who have no problems have satisfaction levels so much higher than owners of other brands that it pulls Miele's overall satisfaction score up."

Many owners of Riccar uprights are also very satisfied with their vacuum, despite it being a less reliable brand. With canisters, Miele and Panasonic are among the more reliable brands and Electrolux is among the least reliable.

UPRIGHT VACUUMS



Source: Results are based on Consumer Reports' 2016 Summer Product Reliability Survey of 33,385 vacuum cleaner owners who purchased a new vacuum between 2011 and 2016. Our statistical model estimates breakage rates by the third year of ownership. Differences of less than 7 points between brands' estimated breakage rates aren't meaningful.



RECALLS



KIDS' RATTLES

Kids II is recalling about 680,000 Oball rattles because a small plastic disk can break and release small beads that pose a choking hazard. The rattles were sold at retailers nationwide and online from January 2016 through February 2017. Kids II has received 42 reports of the beads escaping the ball, including two beads found in children's mouths. **What to do** Immediately take the rattle away from children and call Kids II at 877-243-7314, or go to kidsii.com for instructions on returning the toy for a full refund.



ELECTRIC BLOWERS

About 121,000 Ryobi 8-amp electric jet fan blowers are being recalled because the plastic fan inside can break, causing the blades to discharge from either end of the blower tube, posing a laceration hazard. The blowers were sold at Home Depot stores and online from December 2015 through December 2016 for about \$40. One World Technologies (the importer) has received reports of 10,681 incidents involving the blowers, including 25 of minor injuries such as lacerations to the face, hands, and legs.

What to do Stop using the blower and contact One World Technologies at 800-860-4050 to get a free replacement.



VIDEO GAME BATTERY CHARGERS

Performance Designed Products is recalling about 121,000 Energizer Xbox One 2X smart chargers for video game controllers because they can overheat, damaging the controller and posing a burn hazard. The chargers were sold online and nationwide from February 2016 through February 2017 for about \$40. The company has received 24 reports of the chargers overheating.

What to do Stop using the charger and contact Performance Designed Products at 800-263-1156, or go to pdp.com for a full refund.

The Pleasures of Popcorn

It's a whole grain, which studies show lowers your heart disease risk.



Is Popcorn the Perfect Snack?

It can be, as long as you're careful to read the nutritional fine print and not be blinded by packaging claims.

by Catherine Roberts

➤ **POPCORN HAS** the crunchy, salty appeal of chips or pretzels, but you can have 3 cups of the air-popped snack for slightly fewer calories than you'll find in one sourdough pretzel.

Perhaps that explains the huge increase in demand for bagged popcorn. According to market research firm Mintel, 54 percent of Americans surveyed in 2016 had purchased ready-to-eat popcorn in the previous six

months, and sales topped \$1 billion. "That's 100 percent growth from four years ago," says Caleb Bryant, a senior analyst at Mintel.

Manufacturers of bagged brands have capitalized on popcorn's relatively healthy reputation, splashing the front of the packages with such claims as "whole grain," "gluten-free," and "50 percent less fat." Many brands also boast the calorie count per cup.

Even some of the popcorn brand names—such as SkinnyPop and Smartfood—make the products sound like health foods, if not outright diet aids.

Consumer Reports' food testing team set out to see how well bagged popcorn lived up to its health claims and whether there were any meaningful differences in nutrition and taste among brands.

Health Perks of (Plain) Popcorn

Though you might not think to put it in the same category as whole-wheat bread or steel-cut oats, popcorn is a whole grain, which research has shown can help your health. A 2016 review of 45 studies published in the British Medical Journal found that eating three servings of whole grains per day was linked to a 22 percent reduction in cardiovascular disease risk and a 15 percent reduced risk of cancer. It's also a good source of antioxidants, compounds that can prevent cell damage.

Of course, a popcorn's healthfulness depends on the ingredients—and the amount of them—it contains, says Beth Kitchin, Ph.D., R.D.N., assistant professor of nutrition sciences at the University of Alabama at Birmingham. A little salt and oil, or sugar in a kettle corn, may not hurt. “But if you're loading it up, you can get into trouble,” she says.

How to Read a Popcorn Bag Label

We looked at the original or the most basic sea salt variety of five bagged brands: Angie's Boomchickapop; Cape Cod; Popcorn, Indiana; SkinnyPop; and Smartfood. All of them had just three ingredients—popcorn, oil, and salt—and contained 70 to 78 calories, 3 to 5 grams of fat, and 40 to 117 mg of sodium per 2-cup serving. That put them in the Good or Fair rating category for nutrition.

The fat and sodium counts cost them a higher rating, says Consumer Reports nutritionist Ellen Kloss. Still, any of the five popcorns makes a healthier choice than chips or pretzels.

The fronts of the packages boast the calorie count per cup. But flip to the back of the bag, and you might start to feel like you need a calculator in hand. That's because the values listed in the Nutrition Facts label are for 1 ounce, and the cup measure for that amount is 3¾ to 4 cups, depending on the brand. To level the popcorn playing field, we consistently used 2 cups in our ratings, which is also what we believe is a good-sized snack. If you eat an ounce (the serving size listed

When a Good Snack Goes Bad

Some companies drench popcorn in chocolate, caramel, or other gooey toppings. The result is that a once-healthy snack suddenly has a lot more in common with candy, cookies, or ice cream.



**2 cups of
Popcornopolis
Strawberries &
Cream Popcorn**

420 calories
21 g fat
15 g sat. fat
45 g sugars



**1.9 cups of
Breyers
Strawberry
Ice Cream**

418 calories
19 g fat
11 g sat. fat
53 g sugars



**2 cups of
The Popcorn
Factory Drizzled
Butter Toffee
Almond
Pretzel Corn**

560 calories
32 g fat
20 g sat. fat
52 g sugars



**2.6 Hershey's
Milk Chocolate
Bars With
Almonds
(1.45-oz. bars)**

546 calories
36 g fat
18 g sat. fat
49 g sugars



**2 cups of
FunkyChunky
Caramel
Corn**

560 calories
28 g fat
10 g sat. fat
68 g sugars



**11 Pepperidge
Farm Salted
Caramel
Cookies**

550 calories
26 g fat
13 g sat. fat
48 g sugars

on the bag), you're in chip territory, nutritionally speaking.

For the most part, our tested popcorns' nutrition was in line with their front-of-the-bag claims. The one surprise was SkinnyPop, a brand that has had a greater percentage growth in sales over the past few years than its biggest competitors. Given its name, a consumer might well think that SkinnyPop is lower in calories and fat, but it actually contains more of both than the other four popcorns have. On its website the company defines “skinny” not as diet-friendly but as “using the fewest, cleanest and simplest ingredients possible.”

“Even when they know a product isn't exactly a health food, people tend to choose products they perceive to be even a little bit healthier than similar ones—and they may eat more of it as a result,” says Temple Northup, Ph.D., who is director of the Jack J. Valenti School of Communication at the University of Houston and has studied the effects of health claims on consumer attitudes and knowledge.

All five brands performed well in our taste tests. Angie's Boomchickapop Sea Salt snagged an Excellent rating for its toasted-corn flavor and crispy-crunchy texture. Cape Cod Seaside Pop Sea Salt even had a tasty flavor similar to that of un buttered movie popcorn.

Are Cheesy and Sweet Styles Worse?

We reviewed two “sister” popcorns (one cheesy and one sweet) to each of the five brands' basic varieties in our tests. For some, the calorie, fat, and sodium differences were less than you might expect. For example, 2 cups of Cape Cod's sinful-sounding Salted Caramel had 10 more calories, less than 1 additional gram of fat, and about 80 more mg of sodium than its Sea Salt variety. Two cups of Boomchickapop White Cheddar had 50 more calories, about 4 more grams of fat, and 143 additional mg of sodium than its sea salt flavor.

In the sweetened ones, the sugars content ranged from less than 1 gram to 17.6 grams per 2-cup serving.

Ratings ➤ **Crunch Time** On popcorn packages, nutrition information is listed for 1 ounce. The number of cups in an ounce varies by brand, so we used label information to calculate values for 2 cups for easier comparison.



Product	Rating		Nutrition Information							Pricing			Ingredients
	Nutrition	Taste	Calories	Fat (g)	Sat. Fat (g)	Carbs (g)	Sugars (g)	Sodium (mg)	Fiber (g)	Package Size (oz.)	Price per Package	Cups per Package (approx.)	
SEA SALT/ORIGINAL													
Angie's Boomchickapop Sea Salt	⬇️	⬆️	70	3.5	0.3	9.5	0	65	2.0	4.8	\$4.00	20	Popcorn, sunflower oil, sea salt.
Smartfood Delight Sea Salt	⬇️	⬆️	70	4.0	0.3	9.0	0	60	2.0	5.5	\$4.00	22	Popcorn, expeller pressed sunflower oil, salt.
Cape Cod Seaside Pop Sea Salt	⬇️	⬆️	70	4.0	0.3	7.5	0	55	1.5	4.4	\$3.70	18	Popcorn, sunflower and/or safflower oil, sea salt.
SkinnyPop Original	⬇️	⬆️	78	5.3	0.5	8.0	0	40	1.6	4.4	\$4.00	17	Popcorn, sunflower oil, salt.
Popcorn, Indiana Sea Salt	⬇️	⬆️	74	3.2	0.3	9.0	0	117	1.6	4.75	\$3.80	17	Popcorn, vegetable oil (canola, sunflower or safflower), sea salt.
SWEET/CHEESY													
Angie's Boomchickapop White Cheddar	⬇️	NA	120	7.2	1.2	12.0	1.6	208	2.4	4.5	\$4.00	11	Popcorn, sunflower oil, whey, cheddar cheese (cultured pasteurized milk, salt, enzymes), nonfat milk, sea salt, lactic acid, natural flavor.
Smartfood Sweet & Salty Kettle Corn	⬇️	NA	224	9.6	0.8	32.0	17.6	176	3.2	10.5	\$4.00	14	Sugar, popcorn, canola oil, corn syrup, salt, soy lecithin, caramel color, natural flavors, rosemary extract (antioxidant), ascorbic acid (antioxidant).
SkinnyPop Naturally Sweet	⬇️	NA	92	5.7	0.6	8.0	<1	57	2.3	4.4	\$4.00	16	Popcorn, sunflower oil, cane sugar, salt.
Cape Cod Seaside Pop Salted Caramel	⬇️	NA	80	4.7	0.3	10.7	2.7	133	2.0	NA	\$3.70	12	Popcorn, canola oil, sugar, salt, maltodextrin, butter (cream, salt), dry molasses, natural flavor, rebudioside A, caramel color.
Cape Cod Seaside Pop White Cheddar	⬇️	NA	134	7.1	0.9	13.3	<1	356	1.8	NA	\$3.70	11	Popcorn, canola oil, maltodextrin, salt, whey, cheddar cheese (milk, salt, cultures, enzymes), buttermilk solids, natural flavor, cheddar cheese (pasteurized milk, cultures, salt, enzymes), soy lecithin, citric acid.
Smartfood White Cheddar Cheese	⬇️	NA	183	11.4	2.3	14.8	2.3	274	2.3	8.5	\$4.00	16	Popcorn, vegetable oil (corn, canola, and/or sunflower oil), cheddar cheese (milk, cheese cultures, salt, enzymes), whey, buttermilk, natural flavor, salt.
Angie's Boomchickapop Sweet & Salty Kettle Corn	⬇️	NA	140	8	0.5	18	8.0	110	2	7	\$4.00	14	Popcorn, sunflower oil, dried cane sugar, sea salt.
Popcorn, Indiana Kettlecorn Sweet & Salty	⬇️	NA	130	5	0	21	9.0	130	2	7	\$3.80	14	Popcorn, cane sugar, vegetable oil (canola, sunflower, or safflower), salt.
Popcorn, Indiana Aged White Cheddar	⬇️	NA	120	8.0	0.8	11.2	1.6	224	1.6	NA	\$3.80	14	Non-GMO popcorn, non-GMO vegetable oil (canola, sunflower, or safflower), whey (milk), maltodextrin, natural cheddar cheese flavor, cheddar cheese (cultured milk, salt and enzymes), buttermilk, salt, natural blue cheese flavor, citric acid, lactic acid.
SkinnyPop White Cheddar	⬇️	NA	86	5.1	0.6	8.6	0	54	1.1	4.4	\$4.00	16	Popcorn, sunflower oil, natural nondairy cheddar flavor, salt, rice flour, natural flavor, lactic acid.

HOW WE TEST: We evaluated five popcorn brands' sea salt or original flavor for taste and nutrition, and 10 sweet and

cheese flavors for nutrition only. To calculate nutrition scores, we used a proprietary nutrition algorithm.

Popcorns are listed in order of nutrition score. Tastings were blind.



Left and below:

Noise-Canceling
Wireless
Home/Studio
Style

JBL
EVEREST
ELITE 700
\$200

74
OVERALL
SCORE

Noise-Canceling
Wireless
Portable

BOSE QUIET
CONTROL 30
\$300

87
OVERALL
SCORE



Wireless
Portable

JAYBIRD X3
\$130

71
OVERALL
SCORE



True
Wireless
Portable

APPLE
AIRPODS
\$160

56
OVERALL
SCORE



No Strings Attached

Today's headphones don't just entertain—some of them also count your calories, coach you through a workout, and even quiet the riot. Now, for the first time ever, totally wireless models are liberating listeners from the hassles of cords.

➤ **THE HOTTEST** developments in consumer electronics these days are as close as your ears. Headphone engineers are using some of the coolest cutting-edge technology to create portable earphones that are totally free of wires (finally!). They've designed some noise-canceling headphone models that deliver both excellent sound and noise-canceling capability. They're also adding fun features and functions to sports models, such as heart-rate and activity monitors and "coaches" that will talk you through your workout routine. There are even models that you can pop into your ears to listen to your favorite songs while you're swimming laps.

We've separated headphones into the three most buzz-worthy categories: true wireless earphones, noise canceling, and sports. Read our rundowns on what you need to know about each type and then consult the ratings at the end of this package to find a pair that is sure to bring music to your ears.

True Wireless Earphones



Wireless headphone sales exceeded sales of wired models last year for the first time. No wonder: Eliminating the need to plug them into a smartphone or other music source also eliminates the irritation of snagging the cord or accidentally yanking them out of your ears at the gym. Until recently, though, wireless earphones were wireless in name only: The earpieces

were still connected by a cord that typically hangs behind the head or is worn in a plastic "collar."

That all changed when the first "true wireless," or totally wireless, earphones came onto the market in late 2015. (Apple got a lot of attention a year later, when it announced its totally wireless AirPods.) As the name suggests, true wireless earphones have no external wires at all. The two untethered earpieces fit into the ears, very much like a pair of hearing aids would. Some, like the Apple AirPods, follow voice commands to do things such as pause or skip to the next song.

The early versions we tested were glitchy: The volume levels didn't always match up in both ears, the sound wasn't always in sync, and the controls were finicky. Manufacturers are working out the bugs and we have now seen some glitch-free models, including Jabra Elite Sport, Apple AirPods, Bragi Dash, and Bragi The Headphone.

Advantages: Because there are no wires, there's nothing to tangle or knot and nothing hanging behind your head, running under your chin, or worn around your neck in a collar. The models we've seen so far tend to fit securely.

Drawbacks: The earpieces of true wireless earphones contain all of the electronics, so they're larger and heavier than most other types, which can take some getting used to. Most hold a charge for only 3 or so hours, which is about half as long as standard wireless models. Several

are controlled by tapping and swiping the earpiece, which can be awkward. One tested model had an app that would work only with an Android phone, so be sure to check before buying.

Noise-Canceling Headphones



Frequent fliers have appreciated the welcome dose of serenity delivered by noise-canceling headphones ever since Bose introduced the first pair almost 20 years ago. (They were used by pilots for at least a decade before that.)

"Noise-canceling headphones are outfitted with microphones that pick up surrounding sound, invert it, and add it back, which cancels out the more constant background noises, to a greater or lesser degree, for the listener," explains Maurice Wynn, a senior tester in our labs. But while many models have long done well at canceling sound, most haven't delivered top-notch audio. Fortunately, there are exceptions. "The best of the noise-canceling wired and wireless models that we've tested have sound quality that edged into the excellent range," Wynn says. One of these, the new Bose QuietControl 30, is the first wireless portable noise-canceling headphone model to be rated Excellent



For more on choosing the headphones that best meet your needs, including an interactive video, see our Headphone Buying Guide at [CR.org/headphones0617](https://www.consumerreports.org/headphones0617).

in both noise reduction and sound quality; two wireless home/studio-style models, the Bose QuietComfort 35 and Sony h.ear MDR-100ABN, also score Excellent in both categories.

Advantages: Some do a good job of dampening sounds and creating a measure of quiet even in the noisiest environments. Although none that we tested delivered the clarity and fine sonic detail of the very best headphones, a handful are now good enough to satisfy demanding audiophiles. Some of the newer models, including the Bose QuietControl 30 and Parrot Zik 3, allow you to adjust the amount of ambient sound that can be heard, meaning you can set them to allow you to hear in-flight announcements while still blocking out a lot of the sound of the jet's engines.

Drawbacks: They're best at canceling steady, constant sound, so they won't eliminate the wail of the crying baby in the row behind you or the horns honking outside your window, but the better models will do a decent job of muffling both.

Sports Headphones



Almost everyone likes at least the *idea* of getting in shape, which might be why well over half of all wireless portable headphones we've rated are sports models (including five of the seven true wireless models). "Sports headphones are popular because they're useful and versatile," Wynn says. "They're typically designed to stay in the ear and not shake loose, a lot of them claim to be moisture resistant, and many of the ones we've rated have very good sound. There's nothing preventing you from using them when you're not working out."

The newest sports headphones are being designed with features more typically found in a sports watch or fitness tracker, including heart-rate monitoring, step counting, distance tracking, and the ability to calculate calories burned. The Jabra Elite Sport, a recommended true wireless model that rates Very Good overall, and the Jabra Sport Coach, a CR Best Buy model

that rates Good overall, both count reps and steps and talk you through your workout while running through your playlist. The Bragi Dash true wireless earphones, which rate Good overall, are designed to be waterproof to a depth of about 3 feet, and can be used by swimmers (though the company cautions that prolonged exposure to salt water and chlorine can damage the earpieces). A built-in player lets users download songs or other recorded files to listen to without pairing the earphones to a smartphone.

Advantages: Generally secure-fitting and light, with some capable of producing very good sound, sports headphones can be a versatile choice.

Drawbacks: They'll only track your steps or other activity while you're wearing them, which can make them impractical to use in place of a fitness tracker. Most of the sports earphones we've rated are isolating designs, which fit snugly in the ear to block out surrounding noise and can be dangerous when running or walking on roadways (see "Sound Safety Advice").

Sound Safety Advice

Listening to music can make a run more fun, but when you're jogging or walking on roads or near traffic, what you don't hear can hurt you. Here's how to reduce the risk and safely enjoy your playlists when you're out and about.

➤ Nearly 6,000 pedestrians were killed by vehicles last year, the highest annual total in more than two decades. The reasons aren't entirely clear, but experts say that distraction caused by electronic devices could be a cause. A recent data analysis suggested that pedestrians wearing headphones are at increased risk of being struck by automobiles and trains, particularly in urban

environments: You can't get out of the way of something in your blind spot that you also can't hear.

➤ Most of the sports earphones we've rated are designed to be isolating, which means that they fit in the ear like an earplug and block out ambient sound. That's great at the gym, where you don't want to hear the clang of barbells and your chances of being run over by a car on

the treadmill are pretty slim. But not being able to hear an approaching vehicle or the bark of an angry dog can be dangerous if you're exercising outside. Some of the newest sports earphones on the market, including the recommended Jabra Elite Sport and the Samsung Gear IconX, address this safety issue with a special "monitor" mode. When the headphones are in this mode,

built-in microphones pick up ambient noises and channel them into the ear so that you can hear traffic, bicycle bells, birds, and whatever else is going on around you. The microphones also pick up the whooshing sound of wind, which can make for a noisy run on a gusty day, but that's a minor irritation compared with the major safety advantage these headphones can offer.

➤ In general, isolating sports earphones with a monitor function, or non-isolating sports earphones, such as the top-rated Beats by Dre Powerbeats2 wireless model, are among the best choices for people who exercise outdoors. Whichever type you wear, remember to keep the volume low enough that you can hear what's going on around you when you're outside.

Ratings > Sonic Boom Whether you're looking for noise-canceling, sports, or true wireless headphones, these are the models to reach for first.

POOR ————— EXCELLENT

CR BEST BUY RECOMMENDED



		Brand & Model	Price	Overall Score	Test Results		Specs	
Rec.	Rank				Sound Quality	Noise Reduction	Wireless	Integrated Volume Control
		NOISE-CANCELING PORTABLE HEADPHONES						
✓	1	Bose QuietControl 30	\$300	87	⬆	⬆	•	•
✓	2	Bose QuietComfort 20i	\$250	74	⬆	⬆		•
		NOISE-CANCELING HOME/STUDIO STYLE HEADPHONES						
✓	1	Bose QuietComfort 35	\$350	87	⬆	⬆	•	•
✓	2	Sony h.ear MDR-100ABN	\$350	86	⬆	⬆	•	•
✓	3	Bose QuietComfort 25	\$300	83	⬆	⬆		•
✓	4	Audio-Technica SonicPro ATH-MSR7NC	\$300	81	⬆	⬆		
✓	5	Sony MDR-1000X	\$350	75	⬆	⬆	•	•
✓	6	Definitive Technology Symphony 1 Executive	\$400	74	⬆	⬆	•	•
\$	7	JBL Everest Elite 700	\$200	74	⬆	⬆	•	•
✓	8	PSB Speakers M4U 2	\$350	73	⬆	⬆		
\$	9	Beats by Dre Studio Wireless	\$250	72	⬆	⬆	•	•
✓	10	Parrot Zik 3	\$400	69	⬆	⬆	•	•
		SPORTS HEADPHONES						
✓	1	Beats by Dre Powerbeats2 Wireless	\$120	76	⬆	—	•	•
✓	2	Bose SoundSport	\$100	76	⬆	—	•	•
\$	3	Jabra Sport Coach Wireless	\$120	71	⬆	—	•	•
✓	4	Jabra Sport Pulse Wireless	\$200	71	⬆	—	•	•
✓	5	Jaybird Freedom F5	\$150	71	⬆	—	•	•
✓	6	Jaybird X3	\$130	71	⬆	—	•	•
\$	7	JLab Audio Epic2	\$100	71	⬆	—	•	•
✓	8	JBL by Harman Under Armour	\$150	66	⬆	—	•	•
\$	9	MEE Audio X7 Plus	\$100	66	⬆	—	•	•
\$	10	Optoma NuForce BE Sport3	\$80	66	⬆	—	•	•
\$	11	Philips ActionFit Sport SHQ2305/27	\$40	66	⬆	—		
\$	12	Samsung Level Active	\$100	66	⬆	—	•	•
		TRUE WIRELESS EARPHONES						
✓	1	Jabra Elite Sport	\$250	71	⬆	—	•	•
	2	Samsung Gear IconX	\$150	60	⬇	—	•	•
	3	Apple AirPods	\$160	56	⬇	—	•	
	4	Bragi Dash	\$300	51	⬇	—	•	•
	5	Bragi The Headphone	\$150	51	⬇	—	•	•
	6	SOL Republic Amps Air	\$150	41	⬇	—	•	

HOW WE TEST: Sound Quality represents the tonal accuracy, clarity, detail, ambience, and dynamics of the

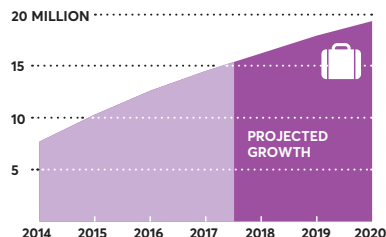
audio reproduced by the headphones. Noise Reduction represents how well the headphones reduce ambient

noise when the active noise-cancellation feature is activated.

Insights

Notable news and smart solutions

NUMBER OF U.S. ADULTS WHO HAVE BOOKED A HOMESTAY



Source: eMarketer.

\$350/night
Entire home.
Perfect for families.

\$80/night
Private room
above historic cafe.

Homes Away From Home

Airbnb, HomeAway, and a handful of other home-sharing websites let travelers pay to stay in a home rather than in a hotel. Fans say they make vacations more authentic and affordable. But do the rewards outweigh the risks?

by Lauren Lyons Cole



\$175/night
Penthouse with
water views.

\$100/night
Houseboat 2 beds,
starry nights.

\$35/night
Shared attic room
with futon.

\$250/night
Double room,
maid and room service.

➤ **IT WAS JUST** after midnight when Ohio native Emil Nuñez and his wife, Mercedes, arrived, suitcases in hand, in front of a squat building in a quiet suburb just outside Kyoto, Japan. The host of the apartment, which they had found and rented on the home-sharing website Airbnb, said he had hidden the key in a yellow box. But with no street lights, finding the key and the door marked “No. 5 Ramen” was a challenge. As they searched and whispered nervously in the dark, they worried that they would wake the sleeping neighborhood.

This wasn’t exactly the unique travel experience they had in mind when they decided to rent someone’s apartment for a few nights rather than book a room in a hotel. They had used the website before, but on those occasions the host had handed off the key in person, or, when they rented a room in someone’s home, was actually there during their stay. One host had even been too hospitable: A woman they stayed with in Rio de Janeiro interfered with their sightseeing plans by insisting on cooking them breakfast, lunch, and dinner. This time, they opted to rent an entire apartment so that they could have a bit of privacy while enjoying a one-of-a-kind trip.

Once they finally let themselves in, they were pleasantly surprised: The apartment was even nicer than it had looked in the pictures. It was pristine and traditionally decorated with tatami mats and shoji sliding doors. The host had even left an assortment of Japanese noodles in the kitchen for them. The next day, they rode the host’s bikes to explore off-the-beaten-tourist-path attractions, including a nearby monkey park and a bamboo tree reserve. Had they stayed in a hotel in the city center, their whole experience, starting with check-in, would have been a lot more conventional but would have lacked what they were

really after: authenticity.

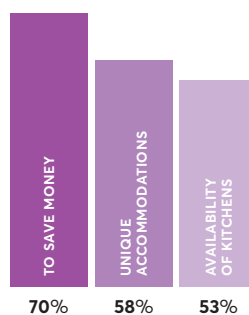
Homestays—rooms, apartments, or homes rented directly from the owner, typically for vacation accommodations—are certainly nothing new. But a handful of websites, including Airbnb (the largest, with more than 3 million global listings), HomeAway, VRBO, and FlipKey, have made them easier than ever to find, to vet, and to book, creating a robust new home-sharing marketplace providing alternatives to hotel accommodations. The sites have also created a new \$100 billion economy, with millions of people worldwide listing their apartments, homes, and extra rooms to generate income.

“Airbnb tapped into a desire for something real and a little bit adventurous that wasn’t being met by the conventional hospitality landscape,” says Leigh Gallagher, author of the recently published book “The Airbnb Story” (Houghton Mifflin Harcourt, 2017), a behind-the-scenes look at

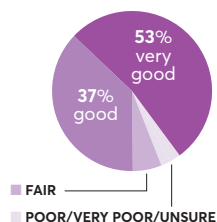


WHY FANS OF HOMESTAYS PREFER THEM TO HOTELS

Cost, uniqueness, and kitchens are the leading draws.



SATISFACTION WITH HOMESTAYS IS VERY HIGH



Airbnb’s rapid expansion. “You can have every kind of experience under the sun, and it’s all wrapped in this design-friendly, easy-to-use website.” Indeed, according to a recent nationally representative survey by Consumer Reports of more than 2,000 adults, almost 75 percent of people who have never used one of these services would consider doing so to experience the local culture.

Live Like a Local for Less

Demand for authentic experiences and unique accommodations are no doubt driving the popularity of these services, but cost savings is an even bigger draw. A full 70 percent of people who have used sites like Airbnb or its competitors say they did so to save money, according to our survey. In the U.S., an Airbnb rental can cost as much as 17 percent less than an upper-scale chain hotel, according to a recent report

5 Ways to Increase the Odds of a Happy Homestay

1. Compare prices carefully.

The per-night or per-week price you see in search results is only part of the total cost. Check the listing for the service fee, which can add up to 14.5 percent to the cost, as well as an additional cleaning fee, which can vary as much as the properties themselves, depending on the size of the rental and the length of your stay. After you've narrowed down your choices to a few favorite properties, compare their total cost.

2. Read between the lines of the reviews.

Because the average Airbnb rating is 4.7 out of 5 stars, it's essential to read reviews with a critical eye. "Everybody feels socially pressured to write positive reviews, so if something is the slightest bit negative, pay attention to that," says Leigh Gallagher, author of "The Airbnb Story." If someone says an apartment is "on the small side," it could well be tiny; if they say that it's "a little run-down," it could be a dump.

3. Choose a property that has many reviews.

Airbnb's "Superhosts" have hosted at least 10 times in a year and received a 5-star review for at least 80 percent of stays, so listings with that status are a good bet. In general, look for a property that has at least eight to 10 reviews, Gallagher says. You'll glean more helpful information from a reviewer with similar tastes and preferences to yours, which you can determine from other properties they've reviewed.

4. Leave nothing to chance.

Manage your own expectations by double-checking everything from how many people can shower before the hot water runs out to whether or not the kitchen has a microwave and a coffee maker. Available amenities such as WiFi will be shown on the listing, but if you don't see something, don't assume it will be there. When in doubt, ask the host—before making a reservation.

5. Negotiate a discount.

If your favorite option is a bit rich for your budget, try your luck at asking for a discount. "As a host, I'll often negotiate on price if I'm not booked solid," says an Airbnb host in Las Vegas who goes by the username Anand. She's particularly persuadable if the guests write a nice note explaining who they are and why they like her house. "Yes, sucking up can work," she says.

from Morgan Stanley (an investor in Airbnb). Factor in the ability to find a rental big enough to accommodate a family or large group, plus access to a kitchen and to nearby restaurants that cater to locals, and the savings can really add up.

Although only about 10 percent of Americans have booked an accommodation through Airbnb or one of its competitors, an overwhelming majority of those who have—92 percent—say they are very likely or likely to do it again, according to our survey.

This combination of healthy demand and high satisfaction is fueling exponential growth. In 2009, the year after Airbnb was founded, travelers booked 21,000 stays through its website; by 2016 that number had ballooned to more than 80 million bookings. Recent estimates put Airbnb's valuation ahead of Hilton's and on par with Marriott's, the hotel behemoth that started

out almost a century ago as a root-beer stand and today is worth more than \$30 billion. HomeAway, the next biggest player, with 1.2 million listings worldwide, was acquired by Expedia for \$3.9 billion in 2015.

Not Your Typical Hotel

Like a hotel website, Airbnb, HomeAway, and other homestay booking sites make it easy for travelers to find accommodations for vacations or business trips (almost 10 percent of Airbnb's customers are business travelers). But any similarity to hotel companies ends there.

Airbnb and its competitors are more like online dating websites than they are hotel companies: They don't provide accommodations; they provide introductions, connecting travelers with potential hosts, then charging a service fee when a property is booked.

Just as with online dating profiles, what you see isn't always what you get, because

negatives can be downplayed with professional photographs and clever descriptions. Unlike with online dating, however, you can't just stay for one drink and then leave if you decide that you and your vacation rental don't have chemistry: Neither the booking sites nor the hosts will refund your money if a property doesn't measure up to your fantasy. So it's important to fully evaluate listings and have a very good idea of what you're getting into before booking, all of which involves more effort than it takes to decide between, say, a Hilton and a Holiday Inn.

In addition to photographs, most sites provide user-generated reviews to help people vet prospective properties. The whole homestay ecosystem is built on trust, says Nick Shapiro, global head of trust and risk management at Airbnb, and reviews are a critical part of its foundation.

But reviews may not tell

the whole story, according to Georgios Zervas, Ph.D., an assistant professor of marketing at Boston University's Questrom School of Business, who has analyzed hundreds of thousands of reviews on Airbnb and TripAdvisor, a website that features user reviews of hotels. According to Zervas' research, the average user rating given to properties on Airbnb is 4.7 stars out of a possible 5, and the average rating of hotels on TripAdvisor is 3.8 stars out of a possible 5.

"While most people aren't likely to leave a positive review after a disappointing hotel stay, that's not always true of a home share," Zervas says. "It's harder to be critical of a person you've gotten to know by corresponding with them or speaking with them on the phone," he says.

Last March, Jeffrey Kornberg, a 31-year-old producer from Brooklyn, N.Y., learned that reviews aren't necessarily

reliable when he and a group of friends rented a lake house in New Jersey through Airbnb. With eight positive reviews and an overall score of 4.5 stars, it seemed a solid choice. What Kornberg found when he arrived at the lake house, however, was very different from the photos he had seen online.

“The sofa had huge tears in the cushions, as if someone had stabbed it with a knife. There were burn marks all over the carpet, like someone had put out cigars on the floor,” Kornberg says. “There was no toilet paper, and one of the air mattresses the host provided deflated in the middle of the night because it had a hole in it.”

Kornberg called the owner to let him know that many details in the listing were misrepresented. He says the owner seemed genuinely concerned to learn about the condition of the home and

explained that the previous renters must have caused the damage. The owner pleaded with him not to leave a negative review, Kornberg says, promising to fix everything before the next reservation. Ultimately, Kornberg says he gave the stay 4 stars, leaving the devil in the details of his written review. He tactfully outlined the negatives, saying they were outside of the owner’s control, while also mentioning that the home had lots of space, beautiful views, and a great fire pit.

Zervas says a careful reading of the text of the reviews can reveal clues about a property’s quality. “Read between the lines to see what expectations the reviewer had, whether they match yours, and if this person is like you,” he says. Study the reviewer’s profile as well as the places he or she has stayed to gauge how similar his or her tastes may be to your own.

It’s important to remember

that disappointments are rare: According to our survey, 65 percent of people who have tried homestay accommodations have not had a bad experience. Of those who did, the most common complaints involved the cleanliness, size, or quality of the rental.

Who’s Got Your Back?

The hotel industry is highly regulated, with laws and safety and fire codes dictating everything from the number and type of locks required on a guest room door to how many smoke detectors and sprinklers a room must have. Homestays, on the other hand, aren’t yet subject to the same oversight and regulations as hotels, and people who use the home-sharing marketplace don’t enjoy the same consumer protections as hotel guests.

Airbnb says that it has safety measures in place to screen out potentially problematic or dangerous hosts and

guests and that it provides resources to educate hosts on emergency preparedness. But neither Airbnb nor its competitors require hosts to comply with even a minimal safety standard (by installing smoke or carbon monoxide alarms, for instance), and they deny any responsibility for the safety of guests or hosts. This lack of regulation or oversight means that travelers must do their own due diligence when booking through these sites.

“Most travelers focus on the way the property looks in the photos, and on its amenities, rather than thinking about the security of the neighborhood or the safety standards inside the building,” says Rob Walker, travel risk specialist for International SOS, the world’s leading medical and travel security services firm. “In a business standard hotel, you can be reasonably confident

Continued on page 29 ➤

What You Gain—and Lose— Choosing a Homestay Over a Hotel

FOR SOME TRAVELERS, staying in a home or an apartment rather than a hotel defies the very essence of vacation:

WHAT YOU GIVE UP

Predictability: From aesthetics to amenities to daily housekeeping, you know what to expect at a hotel, especially the big chains.

Uniqueness: From chic city apartments to castles to tree houses, the variety of accommodations is limitless.

Guest services: You won’t have a concierge on hand to book dinner reservations or recommend that perfect shop.

Privacy: Renting a home or an apartment means freedom from having to deal with hotel staff—or anyone else, for that matter.

Housekeeping: Who doesn’t like a freshly made bed and fluffy new towels? Only hotels offer this indulgence.

Comfort: Vacation rentals offer many of the conveniences you’re used to at home, including more space to spread out.

services you lose in a home rental (unless you book through a high-end service such as Onefinestay.com), but

Room service: Though you might be able to have food delivered, you’ll have to give up ordering breakfast the night before.

A kitchen: You don’t have to use it, but it’s nice to have if you want to save some money and be able to invite new friends over for your famous paella.

what you gain can more than make up for the loss of convenience. Here’s a look at some of the trade-offs.

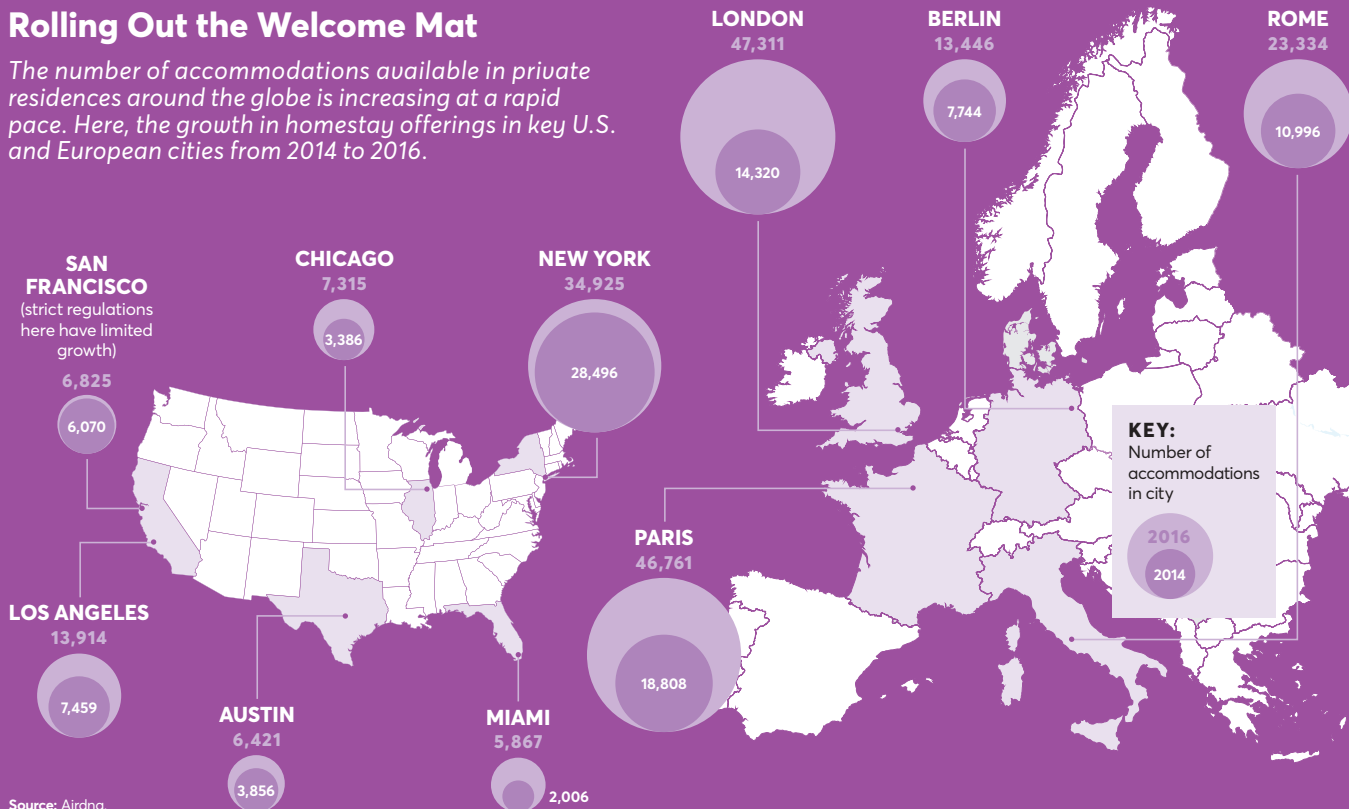
Fitness center: Most hotels have gyms or workout rooms so that guests can stay fit while they travel, but they’re relatively rare in vacation rentals.

Value: Vacation rentals can offer great value for the money. For instance, you can usually find one that will accommodate a large group for much less than a hotel.

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Rolling Out the Welcome Mat

The number of accommodations available in private residences around the globe is increasing at a rapid pace. Here, the growth in homestay offerings in key U.S. and European cities from 2014 to 2016.



Source: Airdna.

Sizing Up the Home-Sharing Websites

How the largest homestay services compare in terms of size, reach, price, and consumer protections.

	NUMBER OF PROPERTIES IN THE U.S. & WORLDWIDE	KEY POLICIES	FEES	PRICES
Airbnb Entire properties and private rooms, mostly in urban destinations.	<p>547,204 3 MILLION</p>	Guest Refund Policy protects travelers from losses due to a covered problem, like a property being misrepresented. Disputes settled through arbitration only.	6-12% service fee. Extra-guest fees and cleaning fees may apply.	Average daily rate in the U.S.: \$150.
HomeAway <i>(includes VRBO)</i> Entire properties, primarily in traditional vacation destinations.	<p>400,000 1.2 MILLION</p>	Book with Confidence Guarantee protects travelers for covered problems. Travelers are permitted to seek compensation in small claims court.	5-12% service fee. Additional cleaning fees often apply.	The average weekly rental is \$1,700 for a 2- to 3-bedroom home.
TripAdvisor Rentals <i>(includes FlipKey)</i> Entire properties and private rooms in urban and vacation destinations.	<p>200,000 835,000</p> <p>NUMBER OF PROPERTIES: WORLDWIDE IN THE U.S. </p>	Payment Protection Policy offers a full refund for covered problems. Travelers have all legal options available to them, subject to TripAdvisor's limitations of liability.	8-14.5% service fee. Additional fees may be charged by the owner.	Varies, depending on location and season, but can range from \$450 to over \$20,000 per week.



Image Conscious
Photos on homestay websites may not tell the whole truth.

How to Avoid Nightmares When Renting Someone's Home

STAYING IN A vacation rental can be riskier than staying in a hotel, which is part of a heavily regulated industry. "Most of the places you go, you're going to be fine," says Rob Walker, travel risk specialist for International SOS. "But a little prep and research ahead of time is going to pay dividends." Here's what to consider before you book your next vacation rental.

Remember that looks aren't everything. In certain destinations, the security of the building and neighborhood safety matter just as much as, if not more than, the appearance and even the cost of the rental. The onus is on you to ask about safety,

Walker says. "If you're renting a place in New York City, you might care a lot about the deadbolt on the door, but if you're renting a ranch in Montana, it might not be much of a concern," says Bill Furlong, HomeAway's VP of North America. Ask the host beforehand about safety concerns that matter to you.

Find out about fire safety. Ask the host ahead of time about smoke alarms and fire extinguishers, and make sure you know how to get out in case of an emergency.

Vet and verify the host. Individuals with verified profiles have shared their Facebook account or provided government-issued identification. Host

reviews can reveal a lot about the person you'll be staying with or renting from. Airbnb says it checks all U.S. hosts and guests for prior felony convictions or sex offender registrations. "Trust your instincts if something doesn't look quite right from the pictures or sound quite right from the host's responses," Walker says.

Inquire about insurance—yours and theirs. In the case of theft, you may be covered by your own policy. But if you trip on the stairs of the rental, the homeowner may not have adequate liability coverage to compensate you. HomeAway sells an insurance policy that hosts can purchase, but it is not required.

Airbnb provides host protection insurance that offers additional liability coverage free in 16 countries, but limitations and exclusions apply. Always read the fine print.

Communicate securely. Texting or calling a host might be efficient, but it could leave you unprotected if a problem arises later. Stay within the site's secure messaging system.

Never book offline. Always complete the booking through the site's secure payment processing system. Never agree to a host's request to transfer money to his or her bank or to pay in cash when you arrive—even if he offers a discount or other compelling reason. Using the site's

payment platform also confers some protection. For example, HomeAway's Book with Confidence Guarantee fully covers your payment if the listing is fraudulent or if the property is significantly misrepresented or inaccessible.

Understand your rights—or lack thereof. When you accept the terms and conditions of a vacation rental, you may be consenting to a background check and forced arbitration, among other terms. You're also agreeing to the host's cancellation policy and how you might be rebooked or refunded if something goes wrong. Be sure to know what you're agreeing to before booking.

that there will be a level of security and safety,” he says.

With a vacation rental, you shouldn’t assume the same (see “How to Avoid Nightmares When Renting Someone’s Home,” at left). “Unless you do deeper research, you don’t know anything about the fire escape standards, the fire suppression systems, or burglar alarms,” Walker says. “You can ask these questions, but what you take as the answer you have to take on trust.”

When Things Go Wrong

Bad experiences are exceedingly rare—in our survey only 1 percent of homestay users had a significant problem related to theft or safety—but when you’re renting from an individual instead of a hotel, knowing who to call for help isn’t as clear. And the incentives for the host to resolve your problem may not be as strong. “There’s far less of a reputational risk to that person if something goes wrong than there is for a big hotel chain,” Walker says.

Chris Polansky, a 27-year-old Brooklynite, found this out the hard way after an Airbnb host pulled a bait and switch on an accommodation he had booked in Los Angeles. After Polansky arrived at the correct address, the host texted a different address that he said would be more suitable for Polansky’s reservation. He offered to pick up Polansky and bring him to the new property 2 miles away.

“When I told him I wasn’t interested in a property 2 miles away from the one I booked and requested a refund, he started texting me insults and refused to refund my money,” Polansky says. He ended up staying on a friend’s couch.

Polansky says he contacted Airbnb later that day to request a refund but was told he had to give the host three days to resolve the issue before Airbnb would get involved, even though he submitted screenshots of the abusive messages. Almost a week later, in what they

HOMESTAY? NO WAY!

Almost 90 percent of people haven’t booked a homestay. Here are their primary concerns.



MOST REPORT NO PROBLEMS WITH HOMESTAYS



Most people who have tried a homestay have had no problem. Those who did commonly complained of an unclean/messy home or lodgings that were small.

called a gesture of good will and a way of welcoming him to the Airbnb community, Polansky received a refund for the amount he paid, less the service charge for the booking. He didn’t use the site again for more than a year.

Polansky might have had better luck if he had followed Airbnb’s recommendations to contact customer service immediately, and to communicate with the host only through the site’s messaging system, rather than through texts and emails. “If anyone ever encounters a listing that is different than as advertised, we ask that they reach out to us as soon as possible so we can assist them in getting rebooked

and/or refunded,” Airbnb’s Nick Shapiro said in an emailed statement. “In the unlikely and even rare event that a guest or a host ever has an issue, our global Trust and Safety team of 600 experts, including former law enforcement officers, is on hand 24/7 to protect our community and help prevent incidents as well as permanently ban bad actors.”

Getting a refund is one thing, but seeking damages when something really goes wrong could leave you running in circles.

“If you invite someone over for dinner and they trip going into your sunken family room, that’s something that would traditionally be covered under your homeowner’s policy,” says Bryan Cook, senior assistant vice president at Amica Mutual Insurance Company. “But it gets tricky when you are renting a home or part of the home.”

Although homestay sites encourage hosts to consider their insurance needs, purchasing a commercial liability policy is not a requirement for listing a property. That means your options for seeking any damages in the event that you or someone in your family is injured during a stay could be limited. “Don’t assume liability coverage is in place or available,” Cook says.

Because the homestay websites don’t require hosts to have liability insurance, the only way guests can know for certain that they’re protected is to ask to see the policy documents and to examine any exclusions or limitations on coverage.

Legal issues with the website are another matter. In order to book a vacation rental, some sites, including Airbnb and HomeAway, require travelers to agree that they will resolve any legal issues that arise via arbitration, a type of streamlined dispute resolution that takes place outside of the court system. Consumers Union, the policy and

mobilization arm of Consumer Reports, opposes this type of forced arbitration, because consumers have no choice but to agree to it to use the service. “Consumers should not be forced by businesses to give up fundamental legal rights and protections in order to shop for products and services in the marketplace,” says George Slover, senior policy counsel at Consumers Union. Arbitration can sometimes be a good option for resolving a disagreement, Slover says, but only when it can be freely chosen by both parties when a full range of options exist, including going to court.

Arbitration also prevents consumers from joining forces to address more widespread problems. Airbnb made headlines recently when a federal judge upheld the company’s forced arbitration policy, ruling that a group of customers could not bring a class-action suit against Airbnb for racial discrimination by a host. Despite the fact that civil rights laws prevent such discrimination, the judge said that Airbnb’s user agreement, which includes forced arbitration and must be agreed to by anyone who uses the service, takes precedence.

Núñez, a seasoned traveler and Airbnb user, has seen no downside to staying in people’s homes. “We never met the owner of the place in Kyoto, but he left us a welcoming note and asked us to use his Polaroid camera to take a picture of ourselves and paste it into a guest book. It was neat to see our photo along with other guests from all over the world,” Núñez says. “It makes you feel like you’re part of a community.”



LEARN

For more travel advice and money-saving strategies, go to our Travel & Vacation Guide at [CR.org/travel0617](https://www.consumerreports.org/travel0617).

Medicine Cabinet Safety Guide

Letting pills pile up for years can have dangerous consequences. Here's how to safely store and dispose of your meds.

by Ginger Skinner

Everyday Rx & OTC drugs



DISPOSAL OPTION #1

Return to a pharmacy in person.

New at Walgreens (in most states) are take-back kiosks available every day, free of charge. Discarded meds are incinerated, not put into landfills. Search for other collection sites at disposemy meds.org or deadiversion.usdoj.gov. Or call the Drug Enforcement Administration at 800-882-9539. You can also wait for National Rx Take-Back Day (April 29 and Oct. 28), when communities set up many designated collection sites.



MORE THAN 212,000 adults and half a million children were accidentally poisoned by prescription and over-the-counter medication during 2015. Having a medicine cabinet packed with unsecured pills on every shelf is a big risk: It makes it too easy for you to grab the wrong meds or for anyone in your household (dog included) to accidentally ingest them. Alarming, 31 percent of people in a CR nationally representative survey said it had been more than a year since they had cleaned out their medicine cabinet, and 19 percent admitted it had been more than three years.

Keep yourself and your family safer by being vigilant. Purge old pills regularly. Lock up drugs that can lead to overdoses or illness. And keep the planet safer by disposing of medications properly.

Want more details on hundreds of common meds and conditions? See our videos and more content at CRBestBuyDrugs.org.

Dangerous Rx

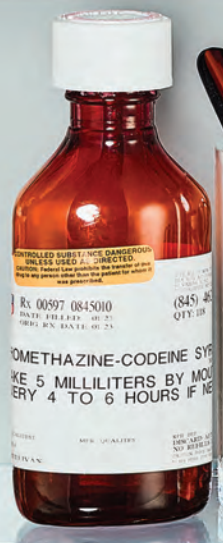
Pain meds, stimulants, sleep drugs, muscle relaxers, and other dangerous drugs



DISPOSAL OPTION #1

Return to a pharmacy in person.

New at Walgreens (in most states) are take-back kiosks available every day, free of charge. Discarded meds are incinerated, not put into landfills. Search for other collection sites at disposemy meds.org or deadiversion.usdoj.gov. Or call the Drug Enforcement Administration at 800-882-9539. You can also wait for National Rx Take-Back Day (April 29 and Oct. 28), when communities set up many designated collection sites.



Syringes, auto-injectors & inhalers



DISPOSAL FOR SYRINGES

Syringes pose a risk of accidental needle sticks, cuts, and punctures, plus a risk of infection from use by other people. Go to safeneedledisposal.org or call 800-643-1643 to find drop-off locations near you.



Do expiration dates matter? Our medical experts say you can keep most prescription and over-the-counter drugs for about 12 months past the expiration date, with critical exceptions. The antibiotic tetracycline should never be taken after that date, because as tablets break down they can become toxic and cause kidney damage. Nitroglycerin and other liquid meds, like insulin and epinephrine (i.e., EpiPens), should especially be kept up-to-date. They lose potency after the expiration date, so they might not work as well or at all.

DISPOSAL OPTION #2

Mail back. Costco, CVS, and Rite Aid sell disposal envelopes for a few bucks to mail pills, capsules, and patches (but not needles or inhalers) to disposal facilities, where they're likely to be incinerated.

DISPOSAL OPTION #3

Put in the trash. First conceal pills by mixing them in a bag with an unappealing substance, like used coffee grounds or kitty litter, then toss. But drugs can contaminate landfill soil and water.

HOW TO STORE

Keep meds up and away in a cabinet in a cool, dry place (not near your shower). Heat and moisture can break down the ingredients more rapidly and potentially make them less potent.

DISPOSAL OPTION #2

Mail back. Costco, CVS, and Rite Aid sell disposal envelopes for a few bucks to mail pills, capsules, and patches (but not needles or inhalers) to disposal facilities, where they're likely to be incinerated.

DISPOSAL OPTION #3

As a last resort, the Food and Drug Administration suggests that you flush certain dangerous drugs, like opioids. But trace amounts can end up in drinking water and also possibly harm aquatic life.

HOW TO STORE

Most ideal: Secure these medications in a locked box made for prescription drugs or in a safe that can't be moved easily.

2 in 10
people who have dangerous prescription drugs, such as Adderall, Oxycontin, Valium, and Xanax, lock them up.*

DISPOSAL FOR INHALERS

Don't put these in the trash, because the remaining contents may be combustible. Contact your local trash and recycling facility for proper disposal instructions.

HOW TO STORE

Keep these well out of reach of young children but where you can get to them easily and quickly in case of an emergency.



Someone told me avocados are good for your eyes. Is that true?

Avocados contain the carotenoids lutein and zeaxanthin, which are linked to eye health and help to give the fruit's interior its color. "These antioxidants accumulate in the retina and lens of the eye," says Marvin M. Lipman, M.D., Consumer Reports' chief medical adviser. "There, they are thought to filter the blue UV rays from the sun—which can damage these eye parts—helping to prevent macular degeneration and possibly cataracts."

Dark leafy greens such as spinach and kale, other dark

green vegetables such as broccoli and zucchini, and egg yolks are also sources of these two healthful compounds. But avocados have the additional perk of being rich in mono-unsaturated fats, which some research suggests may help reduce macular degeneration risk. Even more beneficial: The fat in avocados helps the body better absorb antioxidants, including lutein and zeaxanthin, not just from the avocado itself but from other fruits and vegetables you eat at the same time. So pairing guacamole with crudité or tossing avocado chunks into a smoothie, salad, or omelet are good vision-saving diet strategies.

Are high-intensity discharge (HID) headlights worth the extra money?

Most cars have halogen headlights, which contain a filament, whereas HID headlights create light by igniting a gas, typically xenon. We evaluate and rate the headlights on every vehicle we test, sometimes testing two versions of a car model—one equipped with halogens and one with HID. So we have a good idea of how HID and halogen headlights compare.

"Our test results have shown that HID lamps generally produce a brighter, whiter light than the yellower light of halogens," says Consumer Reports automotive engineer Jennifer Stockburger. "They're also better at illuminating the sides of the road. Some—but not all—HID lamps may enable drivers to see a greater distance straight ahead compared to halogen lamps." That "down the road" light is the most important safety factor with headlights. We would recommend HID over the standard halogen headlights only if the HID lamps allowed you to see farther ahead.

Because not all HID are created equal and not everyone will prefer them over halogen headlights, the best way for you to decide is to do a nighttime test drive on two versions of the car: one with halogens and one with HID, to see which you like more. If you prefer the HID, keep in mind their added initial cost (typically around \$400 to \$500) and their higher replacement cost if you break one. HID bulbs range from \$70 to \$150 (vs. about \$20 for halogen) and the ballast, which powers the lights, can cost between \$200 and \$400 per unit (some vehicles use two bulbs and two ballasts per side).

My laptop looks like it has been through the wars. How do I clean it up without damaging it?

"For your own safety, first make sure to unplug and power down your computer," says Consumer Reports product tester Antonette Asedillo.

"For your laptop's safety, don't ever use bleach or other harsh cleansers, which can cause permanent damage."

Clean the exterior by gently wiping it down with a lint-free cloth lightly dampened with plain water.

For the screen, first remove dust with a dry microfiber or soft, lint-free cloth (tissues or paper towels can scratch). For a more thorough cleaning, wipe the surface in small circles using light pressure with the same damp lint-free cloth you used on the casing. Never use any chemicals, glass cleaner, or alcohol on the screen or spray anything directly onto it. Doing so could damage its coating.

To remove donut crumbs and other debris from the keyboard, use the small crevice-tool brush of your vacuum cleaner. You can also blow away debris with a can of compressed air or turn the keyboard upside down, give it a shake, and remove whatever remains with a small paintbrush or the sticky part of a Post-it note. Finish by wiping down the keyboard with a cloth that's very lightly moistened with water, then blowing out the ports with a can of compressed air.



LEARN

We have more than 140 in-house experts who research, test, and compare! Send your questions to: CR.org/askourexperts ... and watch for the answers.



Real Relief From Back Pain

There's a revolution in the treatment of back pain now that research shows that physical therapy, spinal manipulation, and yoga can help as much as surgery or drugs—with far fewer risks. Discover which treatments are right for you, and how to cover the costs.

by Teresa Carr

a

typical week for Thomas Sells includes acupuncture, tai chi, yoga, and a couple of hours with a massage therapist and sometimes a chiropractor. You might think that

the retired bank vice president and business manager in Southern California is simply enjoying a pampered spa lifestyle.

But Sells gets most of those services through the Department of Veterans Affairs—all for his aching back.

Those VA programs are more necessity than luxury, says Sells, who first injured his back carrying heavy packs as a combat soldier in the Vietnam War.

“None of these therapies were available to me back then,” he explains. “Had I known then what I know now, I could have avoided decades of debilitating pain.”

It used to be that those treatments were considered fringe, but no more. Growing research shows that a combination of hands-on therapies and other nondrug measures can be just as effective as more traditional forms of back care, including drugs and surgery. And they’re much safer.

In February the American College of Physicians (ACP)—which represents primary care doctors, the providers people consult most often for a backache—issued new guidelines for back-pain treatment, saying that the first line of defense should be nondrug measures.

That advice is backed up by a new nationally representative Consumer Reports survey of 3,562 back-pain sufferers. It found that more than 80 percent of those who had tried yoga or tai chi or had seen a massage therapist or chiropractor said it had helped them.

Altogether, a higher percentage of people in our survey who saw a yoga or tai chi instructor, massage therapist, chiropractor, or physical therapist said the advice or treatment was helpful, compared with those who said they saw a doctor.

“Many physicians who are used to writing prescriptions right off the bat or sending patients for tests are going to have to rethink the way they manage back pain,” says Nitin S. Damle, M.D., a former ACP president.

But here’s the problem: People also told us that their insurers were far more likely to cover visits to doctors than those for nondrug treatments—and that they would have gone for more of that kind of treatment if it had been covered by their health insurance.

For this report on back pain, we drew on the latest research and advice from experts, as well as our own survey results, to find out how to get you off the couch and back to your daily routine as soon as possible.

We’ll share what works, how to find a good practitioner, and how to get your insurance to cover today’s most effective treatments.

New Clues to ‘Cures’

Back pain strikes most of us at some point. It’s one of the main reasons people go to a doctor, accounting for more than 24 million visits each year in the U.S., according to the Centers for Disease Control and Prevention.

More than one of four in our survey said that an episode of back pain “severely” interfered with their daily life. One-third said that when the pain was at its worst, they had difficulty going to work. And 44 percent said they worried about the impact their aching back would have on their future.

But there’s good news. “Even though back pain can be severe at first, it almost always gets better,” says Benjamin Kligler, M.D., national

director of the Integrative Health Coordinating Center for the Veterans Health Administration.

But “what has been considered ‘conventional’ care, including prescribing opioid pain medication, can actually short-circuit healing,” he says. These drugs include opioids such as hydrocodone and oxycodone.

As a young combat soldier, Sells says he turned to alcohol and illegal drugs to numb his back pain. “That took me down a dangerous road,” he recalls. “I became addicted.” With help from recovery programs, he says he has been clean and sober for 30 years.

But even with his attempts to self-medicate, his low-back pain continued to worsen over time. “It became so bad I could barely walk,” Sells says. “I consulted with surgeons but I worried about the risks, and given my history, I didn’t want to take opioids.”

Instead, he looked for something safer, and came across a class at the VA in tai chi, which combines slow, gentle movements with deep breathing and meditation.

Soon he noticed improvements, gradually adding more exercise and hands-on therapies, which he says manage his pain while keeping his “mind, body, and spirit strong.” And he’s become so good at tai chi that he now studies with a grand master. “It’s given me back my life,” Sells says.

Success stories like this, combined with new research, convinced the agency to make nondrug therapies a foundation of its pain-treatment strategy. As a result, the VA has cut overall opioid use by 25 percent since 2012, according to a March 2017 analysis published in JAMA Internal Medicine.

Why Your Back Hurts

Medical experts surmise that back pain has bedeviled humans ever since we started walking on two feet, says Richard Deyo, M.D., a professor of evidence-based medicine at Oregon Health and Science University and an author of the main scientific review that led to the new ACP guidelines.

Standing upright requires the spine to support the weight of the upper body while still being flexible enough to bend in many directions. That puts a lot of stress on the back’s complex network of bones, muscles, and ligaments. For example, muscles and ligaments can be overstretched, the gel-like disks cushioning the



Spinal manipulation did me a world of good. My chiropractor had me do a lot of exercises on my own, which I continue to do. I’m so happy to get my active life back.

—ROSEMARY MAZIARZ,
67, St. Charles, Ill.

spinal bones can bulge, and the disks can slip, pressing painfully on spinal nerves.

Sometimes, all it takes to trigger a malfunction is lifting something heavy, twisting awkwardly, or simply sitting too long with poor posture. (See “5 Causes of Back Pain,” on pages 36 and 37.)

Aging can make the situation worse because disks wear and shrink. Add to that diminished strength and flexibility, and you have the perfect conditions for pain.

Too Many Tests and Treatments?

When a back attack strikes, often the first reaction is to run to a doctor for an X-ray or MRI to see what’s causing so much pain and possibly to ask for a prescription.

Doctors increasingly have an inclination to order more tests and write more prescriptions. A 2013 study in the Journal of the American Medical Association found that between 1999 and 2010, the prescribing of powerful narcotic pain meds increased by 51 percent, the use of CT and MRI scans jumped by 57 percent, and referrals to surgeons, neurologists, and other specialists more than doubled.

These kinds of escalating interventions are still the hallmark of how back pain is usually treated in the U.S., Deyo says. But those conventional approaches don’t always work and can cause other serious problems.

“Overall, we’ve seen no reduction in either pain or disability,” Deyo says. “And at the same time, rates of serious complications and even death are rising due to overuse of invasive treatments and opioids.”

Conventional treatment often fails because “it focuses on individual symptoms and broken parts,” says Donald Levy, M.D., medical director of the Osher Clinical Center for Integrative Medicine at Brigham and Women’s Hospital in Chestnut Hill, Mass.

Instead, he says, doctors “should be thinking about treating the whole patient—helping people get stronger, which will not only speed recovery but also help prevent future episodes of pain.” (For advice on how to do that, see “A Kinder, Gentler Therapy Plan,” on pages 40 and 41.)

Here’s how overusing common back-pain tests and treatments can make the discomfort worse, not better.

Continued on page 38 ➤

5 Causes of Back Pain

Not all injuries are created equal. Here, some of the most prevalent conditions and symptoms.

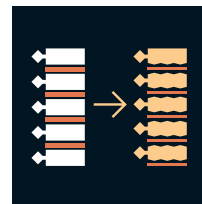
Muscle Injuries

Overstretched or injured muscles, tendons, or ligaments can result in strains, sprains, or spasms. Poor posture, prolonged sitting, strenuous work, and repetitive action such as throwing a ball or weeding a garden can stress so-called "soft tissues" in your back. In our survey, this was the most common cause of back pain, affecting over one-third of respondents.



Degenerative Changes

As you age, the gel-like disks cushioning the bones of your spine and the cartilage lining the joints can begin to wear. That allows the bones to rub against one another, causing osteoarthritis. Some degeneration of this kind is harmless and unavoidable. Imaging studies show that almost everyone older than 60 has signs of spinal wear and tear. But most never report significant pain.



You've Had a Back Attack. Now What?

A timeline for a safe recovery.

YOU LIFTED a toddler, reached high for a jar in the kitchen, or twisted for that dastardly overhead on the tennis court. And now the pain in your back is excruciating.

So what to do? First, some reassurance. Though a back injury can knock you out of commission, a vast majority of people feel much better within several weeks, research shows.

Overreacting can lead to more harm than healing. Opioid pain drugs and unnecessary tests and treatments can delay recovery and cause new problems.

When Pain Strikes

CALL YOUR DOCTOR if it's accompanied by symptoms that can indicate a serious problem, including:

- Unrelenting pain, especially after a hard fall or an accident
- Weak or numb legs
- Loss of bladder or bowel control
- Fever, chills, or infection
- Unexplained weight loss
- A history of cancer

If none of those apply to you, these steps can provide quick relief:

APPLY HEAT. Try a warm shower, a hot-water bottle, or a heating pad or wrap. These can speed healing by causing blood vessels to dilate, increasing blood flow, oxygen, and nutrients to the tissues. There's less evidence for icing, though some people say it feels good. Put a towel between your skin and the cold, and keep sessions to less than 20 minutes.

GET COMFORTABLE. Try lying on your back with your legs up on a chair or on your side with a pillow between your bent knees, sitting with a pillow behind your back, or standing with one foot on a stool.

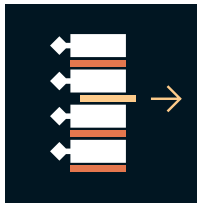
STRETCH. Do slow, gentle moves, such as pulling your knees to your chest while lying down or bending slightly backward while standing.

DON'T STAY DOWN. Walk every few hours.

CONSIDER AN OTC PAIN RELIEVER. While new advice emphasizes nondrug measures, anti-inflammatories such as ibuprofen (Advil or generic) or naproxen (Aleve and generic) are okay for a week or so and work better for back pain than acetaminophen (Tylenol and generic).

Herniated, or Slipped, Disks

Lifting, pulling, bending, or twisting puts pressure on the disks. That pressure can cause them to bulge or slip. When a bulging disk in the lower spine irritates the sciatic nerve, the sharp pain, called sciatica, is often excruciating and can radiate down a leg even when there's no back pain. Slouching at the waist can worsen symptoms.



Spinal Stenosis

The spine responds to degenerative changes by growing new bone in the joints and thickening the ligaments to provide better support. But over time those bone spurs and thickened ligaments narrow the space around the spinal cord and can irritate nerves. Symptoms include numbness, weakness, or cramping in the back, buttocks, arms, or legs. Walking usually worsens symptoms; rest or sitting leaning forward tends to offer relief.



Spinal Instability

When disks and joints wear, they don't do as good a job supporting the spine. As a result, vertebrae move more than they should. In some cases a bone slides forward, causing a condition called spondylolisthesis. Symptoms often come and go suddenly, sometimes shifting from one side of the body to the other, and can include a feeling of weakness in the legs with prolonged standing or walking.



After a Week or So

IF YOU'RE STILL in pain, see a doctor. At the appointment:

MAKE A PLAN. Discuss how you can help yourself get better, including exercises to strengthen your back. If you've been inactive for a while or need instruction, ask for a referral to a physical therapist.

ASK ABOUT HANDS-ON THERAPY. Acupuncture, massage, and spinal manipulation can help, research shows.

DISCUSS PRESCRIPTION MEDS. If ibuprofen or naproxen isn't enough, consider asking your doctor about a prescription muscle relaxant such as cyclobenzaprine (Flexeril and generic) or tizanidine (Zanaflex and generic). They're safer than opioids but still pose their own risks and can make you drowsy, so consider taking them at bedtime.

Two to Four Weeks

YOU CAN USUALLY return to more or less normal life at this point and go off meds, but it's important to keep moving. If you're still hurting, consider changing your approach, maybe trying physical therapy instead of a chiropractor or acupuncture, because not all treatments work for everyone.

One to Three Months

AT THIS POINT you should be able to stop or curtail your visits to nondrug practitioners, but keep exercising. If pain or symptoms such as leg weakness continue or worsen, you may need an MRI or other imaging test to check for an underlying problem, such as a pinched nerve or broken vertebrae. A steroid injection may ease pain from an irritated nerve for up to a month, but it won't speed healing and in rare cases can cause infections and other serious side effects.

Three Months or Longer

NEARLY ONE-THIRD of people we surveyed reported having back pain for most of the past three years. It can take weeks or months for a bulging disk to heal, and people with severe arthritis in the spine may never be completely pain-free. In those cases, other measures may be needed, though it's still wise to progress slowly.

AVOID DANGEROUS MEDS. If nondrug treatments don't help enough, guidelines from the American College of Physicians say to consider one of two choices: tramadol (Ryzolt, Ultram, and generic), a pain drug that is chemically similar to opioids but appears to be less addictive; or duloxetine (Cymbalta and generic), an antidepressant that also works as a pain reliever.

Opioids should be considered a last resort and used with great caution. That means they should be prescribed at the lowest effective dose and taken for the shortest time possible to address your pain.

DON'T RUSH TO SURGERY. An operation should be considered only if an imaging test confirms an abnormality, such as a bulging disk or narrowed spinal column, that could be the source of your symptoms and could be corrected through surgery. But even then, surgery isn't always the way to go. Research shows that many people with those problems get better over time whether or not they've had surgery.

The Trouble With Imaging

A vast majority—82 percent—of our survey respondents who saw at least one healthcare professional for back pain said they got an X-ray, a CT scan, or an MRI. But most people who develop back pain don't need those tests.

Why not? Because, Levy says, “the broken parts seen on imaging studies do not always correlate with the source or the degree of pain.”

But when doctors see signs of arthritis or other damage, they often have an urge to fix it, Levy says, “and that can lead to unnecessary surgery.”

It's not always wise for patients to see those abnormalities, either, because it can undermine their confidence that they can continue to lead healthy, active lives. “All of a sudden, people may think, ‘I'm not someone with a temporary bout of pain, I'm a back-pain patient,’” says Matthew Kowalski, D.C., a chiropractor at the Osher Clinical Center. “And that image can stay with them for the rest of their lives.”

The Risks of Opioids and Surgery

About one-third of our survey respondents said they took prescription drugs for their back pain, and of those, 57 percent were prescribed opioids.

The ACP strongly advises against that practice. For one thing, opioids don't necessarily relieve pain much better or help you move more easily than over-the-counter anti-inflammatory drugs such as ibuprofen (Advil and generic) or naproxen (Aleve and generic).

And while those OTC drugs do pose some risks when taken long term, they're still much safer than opioids. Narcotic medications often cause side effects such as constipation, drowsiness, headaches, and nausea. The longer you take them, the greater the risk of addiction and overdose, especially when taking high doses.

A recent review in the *Journal of the American Medical Association* of 20 trials involving nearly 7,300 patients found that opioids didn't provide significant relief for people with chronic back pain. Further, half the participants dropped out early because the medication didn't work or the side effects were intolerable.

Surgery should always be the last option, and only if your pain has lasted longer than three months with treatment and your symptoms are severe and clearly linked to the problem seen



I had never thought of doing yoga, but I found that it relieved tension and eased my back pain. I also sleep better. Now the prescriptions in my medicine cabinet are just gathering dust.

—MATTHEW CASTRO, 34,
San Diego

in an imaging test. But even then, it's reasonable to hold off on surgery if you're seeing improvement, Levy says.

For one thing, it can't cure arthritis, injured or weak muscles, poor posture, or many other common causes of back pain.

Even symptoms caused by a herniated (slipped) disk or spinal stenosis (narrowing of the spinal column) may resolve over time with those simpler, less aggressive therapies. And taking that approach is safer than surgery, which carries rare but serious risks such as infection, blood clots, and damage to the spine.

Personalize Your Treatment Plan

Everyone responds to pain differently, and there's no set strategy for treating a painful back that works for all.

So where to start? Staying active is key, experts agree. The less active you are—and the longer you're inactive—the faster your muscles weaken, your ligaments and tendons stiffen, and the cushioning between your disks dries out, all of which can delay your recovery, research suggests.

Yet three-quarters of our survey respondents reported bed rest as one of the first three treatments they tried. That, it turns out, wasn't a good idea. When asked what they would have done differently to treat their pain, 43 percent of the back-pain sufferers said they wished they had exercised more.

“Relief is often on the other side of activity,” Kowalski says. “A good practitioner should teach you some exercises that you can do on your own, and also talk to you about the ergonomics of your daily activities, such as how you sit at your desk.”

Next, you may want to add a hands-on therapy such as acupuncture, massage, or spinal manipulation from a chiropractor, physiotherapist, or other healthcare practitioner, which can help alleviate pain as you work to get stronger.

And last, consider trying things to strengthen your mental outlook, such as mindfulness meditation, because pain affects people mentally as well as physically. (See “Depression and Back Pain,” on page 43.)

Thomas Sells says that a combination of approaches has worked for him. “I feel better now than I did as a much younger man,” he notes. “Mentally, physically, and spiritually, I'm in the best place in my life.”



Stretch It Out
Slow, gentle stretching
of the muscles in your
back can ease pain
and help prevent it, too.

A Kinder, Gentler Therapy Plan

New research has turned some medical advice on its head: Hands-on methods are preferred over drugs or surgery.

NEW GUIDELINES FROM the American College of Physicians recommend starting with treatments such as acupuncture, massage, and yoga, and turning to drugs or surgery only when those more active therapies don't work.

Many of the 3,562 back-pain sufferers we recently surveyed support that strategy. People who sought advice and care from nondrug practitioners were generally more likely to say it helped compared with those who sought care from medical doctors. But insurance often doesn't cover "alternative" care. Still, it can be worth checking with your insurer and asking for a referral from your doctor, which makes coverage more likely. (See "Who Will Pay the Bill?" on page 45 for tips on covering those costs.)

Here, we list the nondrug therapies in the order they performed in our survey, as well as the range that survey respondents said they spent for each treatment, reflecting regional cost variations and differences in the number of treatments received.



1. Yoga and Tai Chi

These exercises strengthen the muscles in your abdomen and back that are crucial to supporting your back. They also improve balance and flexibility, and help you become more aware of a healthy posture. Yoga and tai chi also encourage a quieting of the mind that allows you to focus on movements or postures, which can ease stress and provide mental distance from your pain.

TOTAL SPENT OUT OF POCKET Less than \$100 (55 percent) to \$1,000 or more (7 percent).

GOOD TO KNOW Research suggests that both are best for pain that has lasted three months or longer. Soon after a back injury, it's okay to try tai chi moves or some yoga if you're familiar with them, but otherwise, wait. Look for certified tai chi instructors at the American Tai Chi and Qigong Association. For yoga, the Yoga Alliance lists schools and the International Association of Yoga Therapists lists instructors with advanced levels of training. For back pain, consider classes described as gentle or relaxing, and avoid those characterized as more strenuous with words like "power" or "Ashtanga."

To really get the benefit, you need to

practice and learn to synchronize physical movements, meditation, and deep breathing.

—LINDA HUANG, director of the American Tai Chi and Qigong Association in Herndon, Va.

2. Massage

This treatment relaxes tense muscles and increases blood flow to injured areas. It also triggers the release of endorphins, feel-good hormones that decrease stress and anxiety associated with pain.

TOTAL SPENT OUT OF POCKET Less than \$100 (35 percent) to \$1,000 or more (9 percent).

GOOD TO KNOW There's an art as well as a science to giving an effective massage. Look for a therapist licensed by your state who specializes in sports medicine or who has experience with back pain. A massage shouldn't make you wince, so make sure that you communicate when the pressure feels good or is too intense.

Over the long term, massage makes you more aware of your body and causes you to notice how the way you sit or stand can be contributing to your back pain.

—MARTHA MENARD, PH.D., a massage therapist and the executive director of the Crocker Institute in Charleston, S.C.

WHICH TREATMENTS OR ADVICE WERE HELPFUL*

89%

YOGA OR TAI CHI INSTRUCTOR

84%

MASSAGE THERAPIST

83%

CHIROPRACTOR

75%

PHYSICAL THERAPIST

3. Spinal Manipulation

This treatment, done by chiropractors and some other healthcare professionals, uses controlled forces—sometimes mild, sometimes firm—to adjust the spine and allow it to move more easily. There are rare reports of serious complications, and while vigorous spinal manipulation shouldn't be done on people with severe osteoporosis of the spine, it's usually safe for others.

TOTAL SPENT OUT OF POCKET Less than \$100 (38 percent) to \$1,000 or more (11 percent).

GOOD TO KNOW Licensed chiropractors (D.C.s) earn a four-year degree. Physicians with a degree in osteopathic medicine—indicated by a D.O. rather than an M.D. after their name—usually focus on primary care and have additional training in the musculoskeletal system. Some doctors of osteopathic medicine offer spinal manipulation as part of their treatment.

A tight joint is like rusty hinges on a door. When you do the adjustment, it loosens up the joint to move more freely.

—RONALD FARABAUGH, D.C., the Farabaugh Chiropractic Office in Columbus, Ohio.

4. Physical Therapy

Physical therapy focuses on improving your ability to do your daily activities and teaches you how to prevent future back problems. Treatments vary, but most combine strengthening and stretching with passive care such as massage and low-level laser therapy (see below).

TOTAL SPENT OUT OF POCKET Less than \$100 (56 percent) to \$1,000 or more (6 percent).

GOOD TO KNOW Physical therapy should be challenging. Once something becomes easy, the therapist should add weight, repetitions, or new exercises. Physical therapists often use hot or cold packs and ultrasound treatments, which warm tissues deep in your body. The treatment can feel good, but you can do it yourself with ice or heat at home. And it's not clear whether ultrasound yields faster healing. So consider using your valuable appointment time for exercise and other therapies.

Fear of making pain or injury worse can be huge for people with back pain. A physical therapist can help you gain confidence to start moving again.

—RACHEL FEINBERG, D.P.T., the Feinberg Medical Group in Palo Alto, Calif.



5. Acupuncture

In Eastern thought, it's believed that inserting thin needles at specific points on the body helps correct imbalances in qi, the flow of energy. From a Western perspective, acupuncture is believed to affect soft tissue and nerves in ways that lessen pain. For example, it may activate nerves to interrupt pain signals as they travel through the spinal cord to the brain.

TOTAL SPENT OUT OF POCKET Less than \$100 (35 percent) to \$1,000 or more (8 percent).

GOOD TO KNOW Make sure the acupuncturist is licensed in your state. Therapy shouldn't be painful, but you might feel a slight twitch when a practitioner inserts the needles. Acupuncture is safe as long as you're in the hands of a trained

and licensed practitioner who uses sterile needles.

Acupuncture is one of the original medicines—humans touching humans. People had to figure out how to care for each other to treat illness and sustain health.

—ARYA NIELSEN, PH.D., assistant clinical professor, the Icahn School of Medicine at Mount Sinai in New York City.

6. Additional Therapies

We don't have survey results on the following two treatments, but the American College of Physicians says that at least some evidence supports them:

BIOFEEDBACK A therapist will first teach you several relaxation techniques, such as deep breathing and progressively tensing

and relaxing muscles throughout your body. Then you'll be connected via electrodes to computer monitors that track your heart and breathing rate, muscle tension, and skin temperature. The idea is that by watching the monitors while practicing those techniques, you can learn to relax tight muscles in your back and decrease physical reactions to daily stress that can worsen pain.

LOW-LEVEL LASER THERAPY

Pointing a laser at the injured site causes blood vessels to dilate, which can increase blood flow to the area. The laser may also temporarily desensitize pain receptors. Ask which type of laser will be used in your treatment. So-called Class IIIb lasers, which are typically used to treat pain, are safer because they don't heat the skin or underlying tissue.

67%
NEUROSURGEON

66%
ACUPUNCTURIST

65%
ORTHOPEDIST OR
ORTHOPEDIC SURGEON

64%
PRIMARY CARE DOCTOR

61%
RHEUMATOLOGIST

How to Keep Your Back Healthy

Back pain often stems from bad habits: slouching at your desk, picking up heavy objects the wrong way, or always carrying your handbag or laptop case with the same hand or over the same shoulder. But soothing stretches and good habits can prevent pain from starting.

Four Great Stretches

These movements can eventually ease pain and help keep it away, too. In each case, inhale deeply and then do a long, slow exhale as you relax into the stretch, says Rachel Feinberg, D.P.T., a physical therapist with the Feinberg Medical Group in Palo Alto, Calif. "Hold it for about 10 to 15 seconds, or whatever feels comfortable," she says. "Stop at any point if it feels painful."



KNEE-TO-CHEST STRETCH

Lie on your back with one knee bent. With hands on top of the knee or behind it, slowly pull it toward your chest and hold. You can also pull both knees to your chest at once.

FIGURE-FOUR STRETCH

Lie on your back with knees bent. Place the outside of one ankle on the opposite thigh. If you're able, grasp the other leg behind the knee and slowly raise it, bringing your knees toward your chest.



PRAYER STRETCH

On your hands and knees, sit back so that your buttocks are resting on your heels. Reach your hands forward until you feel the stretch in your middle back. Reach forward and to the side to feel the stretch along the sides of your spine.

BRIDGING

Lie on your back with knees bent, feet flat on the floor. Using the back of your leg muscles (not your lower back), lift your buttocks and back high up from the floor. Hold the stretch, then slowly roll down to the starting position.

Depression & Back Pain

The brain can be a powerful healer of the body's discomfort.

At Your Desk

It's unclear whether standing or sitting at a desk is better for you. What is clear is that how you sit or stand matters. And whether you sit or stand, it's always good to take frequent breaks to walk around, adjust your position throughout the day, and if possible, alternate between sitting and standing.



SITTING

You shouldn't have to look up or down to read your computer. Your shoulders should be relaxed, with upper arms at your sides and elbows close to your sides. Hands, wrists, and forearms should be straight and

almost parallel to the floor. Don't let your lower back slump or arch. Keep your thighs almost parallel to the floor and your feet flat or on a footrest. Don't cross your knees or ankles.

STANDING

Don't slump or lean forward. Your legs, torso, neck, and head should be in line and straight. Stand on a cushioned pad, and elevate one foot on a stool if that's comfortable.



Lifting

Bend at your knees to squat down rather than bending over at the waist, and keep your elbows close to your body and the object as close to you as possible. As you lift, be aware of tightening your stomach muscles and using your legs rather than your back. Don't arch backward. Turn by moving your feet, not twisting your torso.



UP TO HALF of people enduring pain for three months or longer also suffer from depression or another mood disorder, research suggests.

That's partly because pain may stem from a physical cause, like a fall, "but it's perceived in the brain," says Robert Kerns, Ph.D., a professor of psychiatry, neurology, and psychology at Yale University. "And the parts of the brain involved in perceiving pain also regulate mood." That means that pain can amplify—or even cause—depression and anxiety, and vice versa.

Yet healthcare providers often don't screen patients with pain for depression or other mental-health problems. "When pain is present, doctors are trained to look for a physical cause," Kerns says. "But if you have chronic pain, your doctor should also ask questions to get at how it's affecting you emotionally."

The promising news is that certain treatments—notably mindfulness meditation, relaxation, and cognitive behavioral therapy (CBT)—can ease chronic back pain.

How the Treatments Help

New back-pain guidelines from the American College of Physicians recommend those treatments, which can reduce your perception of pain by shifting the way you think about and react to it.

Stress and tension can worsen pain, so any technique that relaxes you can sometimes help you hurt less. And dwelling on pain makes it worse, so meditation and CBT help by teaching you to put some mental distance between you and your physical problems.

With CBT, you learn to identify negative thoughts and behavior linked to your pain and develop ways to change them. For example, you might be fearful that activity will worsen your condition. A therapist can encourage you to question that idea and find ways to start moving again. With time, you "develop the sense that pain is manageable," Kerns says.

Cognitive behavioral therapy usually involves seven to 12 sessions, Kerns says, and if it's going to work for you, expect to see results within four sessions.

Over-the-Counter Gadgets & Gizmos

We turned an expert eye on products to find out what works, what doesn't, and what might make things worse.

BACK-PAIN SUFFERERS are admittedly desperate and willing to try anything—shoe inserts, devices that zap them with electric pulses, or braces to wrap around their lower back. And sales of back creams, patches, and wraps amounted to nearly 1 billion dollars last year.

But “many of these items are expensive, and research doesn’t always show that they work,” says Gerardo Miranda-Comas, M.D., an assistant professor of rehabilitation medicine at the Icahn School of Medicine at Mount Sinai in New York City. And the American College of Physicians, in its new guidelines, finds good evidence only for heating pads. Here are some things to consider before you invest in over-the-counter products.

Worth a Try

Heating pads or wraps

They cause blood vessels to dilate, which can increase blood flow to tissue and ease pain.

COST ThermaCare Lower Back & Hip Heatwraps, which are disposable, cost about \$7; the SoftHeat Pain Relief for Whole Body Wellness Wrap, which is reusable, runs about \$20.

WHAT EXPERTS SAY

A 2016 analysis in the Journal of Chiropractic Medicine found that heat wraps increase muscle temperature and blood flow to tissue, says Alan Hilibrand, M.D., a spokesman for the American Academy of Orthopaedic Surgeons and co-director of spine surgery at the Sidney Kimmel Medical College of Thomas Jefferson University in Philadelphia.

CR'S TAKE *It's worth trying one—but don't use it for more than 20 minutes at a time. "I've had patients who fall asleep with them on and as a result develop mild burns," Hilibrand says.*



Never put these products over creams or patches (see below). And note that a hot-water bottle works as well.

Creams and patches

Rub-on creams that contain capsaicin (found in chili peppers) or methyl salicylate (oil of wintergreen) create a feeling of heat. Those with menthol cause a cooling sensation. Lidocaine-based products have a numbing effect.

COST An over-the-counter patch that contains menthol, like the Absorbine Jr. Pain Relief Back Patch, costs \$4. A product with 4 percent lidocaine, like

the Lidocare Pain Relief Patch Back/Shoulder, is about \$19.

WHAT EXPERTS SAY

There's little research on OTC patches and creams, but prescription-strength versions of lidocaine and capsaicin products can help, research suggests.

CR'S TAKE *OTC lidocaine products are your best bet because they're closest to the prescription versions, our experts say.*

Short Term Only

Back braces and wraps

These wrap around your torso and try to duplicate the support you get from back and abdominal muscles.

COST The Neoprene Lumbar Support Belt costs about \$12; others, like the Bauerfeind Brace, can cost as much as \$175.

WHAT EXPERTS SAY

Some research shows that back supports can improve function for people with pain that has lasted one to three months. But over time they might weaken your stomach and back muscles, undermining your recovery.

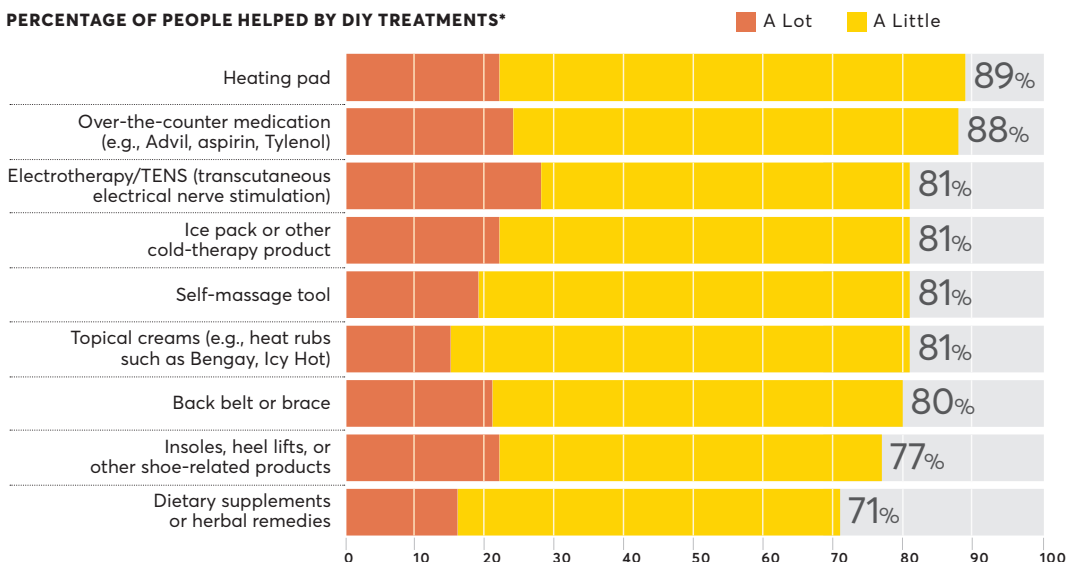
CR'S TAKE *Use only for a few hours at a time, for a few days, soon after back pain starts. "They're fine for a short period of time—for example, someone getting around a back strain who has to stand up to give a presentation," Hilibrand says.*

Mostly Skippable

At-home TENS units

You can buy small battery-operated transcutaneous electrical

PERCENTAGE OF PEOPLE HELPED BY DIY TREATMENTS*



nerve stimulation devices, which emit gentle electrical pulses, that are similar to the devices used by some physical therapists and chiropractors.

COST The Aleve Direct Therapy TENS device costs about \$50; the Quell wearable pain-relief device retails for \$250.

WHAT EXPERTS SAY

A small company-funded study of the Quell device published in the *Journal of Pain Research* found that 80 percent of users with chronic pain reported improved symptoms. But a review in the *Journal of Pain Management* concluded that there wasn't much evidence that even the more powerful devices used by healthcare professionals help much for back pain.

CR'S TAKE *The OTC devices "may not provide enough electrical stimulation to really do anything," says Kush Goyal, M.D., a back-pain specialist at the Cleveland Clinic.*

Insoles

These foot supports are meant to correct imbalances that can cause you to stand in ways that worsen back pain.

COST A simple OTC product such as Dr. Scholl's Back Pain Relief Orthotics is about \$14; the Protalus Model S retails for \$80.

WHAT EXPERTS SAY

The evidence is inconsistent whether even prescription orthotics designed for your anatomy help much.

CR'S TAKE *They could help if your pain stems from a clear knee or foot problem, but don't expect too much.*

Who Will Pay the Bill?

Try these smart strategies to help get coverage for hands-on therapies.



THE NONDRUG back-pain treatments that people in CR's survey often described as helpful were, unfortunately, less likely to be covered by insurance.

On average, people spent more than \$200 out of pocket over the course of their full treatment for acupuncture, massage, or care from a chiropractor. Almost one in four spent \$500 or more. That compares with about \$80 that people spent out of pocket for care from an M.D.

A big barrier for many patients is that insurance companies often refuse to cover nondrug therapies, says Nitin Damle, M.D., former president of the American College of Physicians, which recently issued new guidelines emphasizing hands-on treatments. But he's "hopeful that the new guidelines will move the needle forward, so there is a shift from pharmacologic to nonpharmacologic treatment."

Insurance companies often cover several visits

for chiropractic care and physical therapy, but only very expensive plans tend to cover acupuncture, massage, and yoga, says Jim Redmond, regional vice president of communications and community investment at Excellus BlueCross BlueShield in New York.

There's evidence that nondrug approaches not only work well but also make economic sense. A 2016 review of 33 studies found that exercise combined with psychological counseling, yoga, spinal manipulation, and acupuncture were cost-effective.

And a pilot program run by Excellus BlueCross BlueShield found that educating doctors about a restrained approach to back pain was paying off for patients and the bottom line. "Imaging, visits to specialists or the emergency room, surgery, opioid prescribing, and costs all decreased," Redmond says, "while patient satisfaction went up."

Still, for now there's a good chance you'll have to pay more out of your own pocket for hands-on nondrug approaches than for more standard care. Here are some tips to help minimize your costs:

REVIEW YOUR INSURANCE POLICY.

Insurers are more likely to cover chiropractic care and physical therapy than other nondrug therapies, but it's worth checking. Thirteen percent of people in our survey who saw a massage therapist said that insurance picked up the tab for more than 75 percent of the cost.

GET A REFERRAL. Your doctor may need to refer you or contact your insurance company explaining why a nondrug treatment is medically necessary.

LOOK FOR DISCOUNTS. Check with your insurer or employee wellness program to see whether it has negotiated reduced rates for therapies not covered by insurance. Also ask providers about discounts for multiple sessions.

SWITCH IF YOU NEED TO.

If your coverage for one therapy runs out before your pain is gone, consider trying another that's covered—say, switching from chiropractic care to physical therapy.

CONSIDER THE TOTAL COST.

If you have a high-deductible plan that requires you to spend thousands out of pocket before insurance kicks in, nondrug treatments can be a good deal compared with conventional medical care.

USE TAX-FREE DOLLARS.

You can use money in a health savings account (HSA) or flexible spending account (FSA) for most nondrug treatments. Keep a copy of the prescription or doctor's note to prove that the treatment is for back pain.

APPEAL. If your insurer refuses to pay for a service you think should be covered, you're entitled to appeal. Check your insurance company's website or call customer service.

A close-up, top-down view of a gas grill with dark metal grates. Two large portions of salmon are cooking, showing distinct grill marks and a golden-brown crust. Surrounding the salmon are several vegetables: red bell peppers, yellow bell peppers, and green asparagus spears, all of which are also showing signs of being grilled. The lighting is bright, highlighting the textures of the food.

The Heat Is On

Given all the new gas grill styles and features, it just might be time for you to ditch your old flame and fire up a top-rated model from our tests.

by **Kimberly Janeway**

Fine Lines

To get great grill marks, look for grates made of stainless steel or porcelain-coated cast iron.



YOU MAY NOTICE that the grill section at your local home center looks a little different this spring. The 2017 fleet of gas grills is filled with new brands, revamped models from old brands, and new features meant to make grilling easier—and maybe even make you a better cook.

“There’s just a lot more to choose from this year, even from long-established brands,” says Mark Allwood, a senior market analyst at Consumer Reports.

Among the 125 gas grills Consumer Reports tested were seven new brands, all of which offer models in the highly competitive price category of \$650 or less and some of which have features often reserved for pricier models. New grills from these and established manufacturers feature LED task lighting under the lid, built-in windows for peeking without letting the heat escape, and Bluetooth temperature probes that ping your phone when the

bourbon-marinated tenderloin is cooked just right.

Grill giant Weber revamped its widely sold Genesis line for the first time in about a decade. Certain changes are improvements, such as moving the propane tank to the side to free up storage space under the cart. Others not so much: The back panel of the LX cabinet models is attached with plastic fasteners instead of bolts, which could explain why it’s already coming off on one of our test models through typical use.

“Construction quality varies widely among the models we tested,” says Cindy Fisher, CR test engineer for grills. “Some are wobbly and made of lower-quality parts, while others feel solid from the lid down.” Her advice? Be sure to look at a grill’s construction before you buy. To learn how to do that, check out our Great Grill Finder on the following pages.

\$400 or less

In this popular price range you'll find grills in every size, from portable to large. But don't expect extra features. And though our testing shows that price isn't a predictor of performance, it is often tied to quality of construction. So think twice about a large grill that costs just a few hundred bucks.



NEXGRILL 720-0830H
\$270 Midsized
CR BEST BUY

77

OVERALL
SCORE

Our top-rated midsized grill gives you four-burner capacity and very good performance, but its lightweight stainless construction is not the sturdiest we've seen.

CONSTRUCTION

> Love the look of stainless? You might not for long at this price range. That's because not all stainless steel is created equal. To keep prices down, manufacturers tend to use thin-gauge stainless, which can make for a flimsy grill. Trading stainless for a well-made model that's painted or porcelain-coated enameled steel might get you a longer-lasting grill.

> Inspect the grill. The parts will usually be bolted together, not welded, so make sure connections are snug. The fewer the bolts, the better,

because they can rust.

> Heft the grates and check what they're made of. Porcelain-coated cast iron can chip and rust. You don't have to worry about chipping or scratching with stainless-steel grates. But both are better at searing and maintaining even temperatures than the lightweight wire grates we've seen on certain models (we mean you, small RevoAce grill).

> Burners are the most frequently replaced part, according to industry data, and a warranty of a year or less is a tip-off that a grill might not be long for this world. In this price range, warranties usually last one to five years; go with the longest one you can find.

CONVENIENCE FEATURES

> It's nice to have wheels or casters on all four legs. Some carts have two wheels and two feet, so you'd have to lift one side to move the grill.

> Look for an electronic igniter,

which relies on batteries to generate a spark that lights the flame. Electronic igniters are easier to light than rotary and push-button starters.

BEFORE YOU BUY

Sturdiness varies among grills that are bolted together. Lift the lid halfway and force it side to side to see how much the frame twists. Check that the wheels are on tight.

\$400 to \$700

You'll find all the sizes except portables here, including a much wider selection of large grills. Be aware that a big and bulky grill doesn't necessarily have a large cooking surface, which is why we group grills by how many burgers they can hold.

CONSTRUCTION

- > Expect a sturdier grill, perhaps one with welded joints. A quick look will tell you if they're welded or bolted together.
- > The more stainless a grill has, the more the grill costs, usually. The stainless might be only on the lid—the part you notice first.
- > Heavy stainless or cast-iron grates should be the norm, so pick them up and make sure they have a nice left.
- > Check the burners with the same thing in mind: They should be heavier than the ones on cheaper grills.
- > Keep an eye out for a grill with a 10-year warranty—you'll start to see them at this range.

CONVENIENCE FEATURES

- > As prices increase, grills should become easier to use. You want a cart with four casters, or at the very least, two casters and two wheels, making the grill easier to move.
- > Look for a side burner for boiling corn or cooking pasta. Having it right there reduces laps to the kitchen.
- > You'll see some pullout grease trays in this price range. They make it easier to clean up meat drippings from the bottom of the firebox.
- > A fuel gauge will help remind you when it's time to refill your propane tank.
- > You can expect most grills in this category to have an electronic igniter, which makes lighting easier.

BEFORE YOU BUY

Given that a grill in this price range should last longer, pay particular attention to fit and finish. Avoid sharp corners or exposed edges, which can cause accidental cuts. Grip the handle to see how close your knuckles come to the lid.



3 EMBERS
GAS7480AS
\$500 Midsized

67

OVERALL
SCORE

This midsized grill from 3 Embers, a new brand in our ratings, features a window in the lid and a 10-year burner warranty, though we were disappointed that it has a rotary igniter.

\$700 to \$1,000

Expect the small to large grills in this price range to be well-built. Many of them take their design cues from pro-style ranges. Here is where you start to find features touted to make grilling easier.

WEBER A
GENESIS II E-410
\$900 Large

68

OVERALL
SCORE

A new look for a widely sold grill, the porcelain-coated enamel lid adds a splash of color on this large model. It has a fold-down warming rack and a fuel gauge.

Brave New Colors

Grills with a zing of color will liven up a patio or deck, and these materials are easier to clean than stainless.

CONSTRUCTION

- Go with a stainless-steel cart with an enclosed cabinet and, if possible, drawers. All the visible seams should be welded to provide a clean look, and the cart should be sturdier than thin-gauge painted-steel carts assembled with nuts and bolts.
- Grill carts should have metal casters rather than plastic ones.
- As the grill price goes up,

construction under the hood should improve. Ideally, you want a firebox made of heavy-duty stainless steel.

CONVENIENCE FEATURES

- Storage drawers are handy for keeping spatulas and other utensils within easy reach.
- If you enjoy grilled food with a smoky flavor, pick a grill with a smoker tray. It holds wood chips and can enhance the food's flavor (though not as much as a dedicated smoker).
- Several grills in this price range are meant to boost your grilling confidence with the

help of a WiFi or Bluetooth thermometer. It lets you keep an eye on the internal temp of the meat without opening the lid and letting the heat escape.

PERFORMANCE UPGRADES

- Boasts about high Btu, or British thermal units, might sound impressive but aren't a reason to choose one grill over another. These figures are a measure of how much heat a grill can generate, but our tests find that a higher number

doesn't guarantee faster preheating or better cooking. ➤ Infrared technology isn't the reason to select a grill, either. Our tests have found that infrared grills perform no better or worse than typical gas grills.

BEFORE YOU BUY

Be sure you're getting a 10-year burner warranty. Given that grills tend to be bigger and heavier in this price range, ask whether assembly is included in the price. Same goes for delivery options and their fees.



WATCH

Watch our free gas grill buying guide video at [CR.org/grills0617](https://www.consumerreports.org/grills0617).

\$1,000 and up

You'll find more large grills to choose from and a wider selection of features. As for quality, you can expect grills in this range to last for many summers to come. At this price, they'd better.

CONSTRUCTION

- Expect heavier-gauge stainless steel and more of it.
- Insist on top-notch fabrication with seamless welds—nothing should be shoddy.
- Heavy-duty grates are the norm. And a must.
- Burner warranties of 10 years or longer are typical, so watch out for manufacturers that skimp with shorter ones.

CONVENIENCE FEATURES

- Expand your culinary repertoire with a rotisserie burner. The motorized spit will slowly grill whole chickens and roasts.
- For grilling after dark, look for LED lights inside the hood and behind the controls. They run on batteries, so keep extras on hand.

BEFORE YOU BUY

Consider whether you'd prefer to not have to refill a propane tank, because almost all grills tested in this price range also come in a natural-gas version or can be converted to natural gas with a kit that costs about \$50 to \$100. You'd need a professional plumber to run a gas line, and of course you wouldn't be able to move your grill once it's installed.

NAPOLEON
LEX730RSBIPSS
\$1,800 Large

68

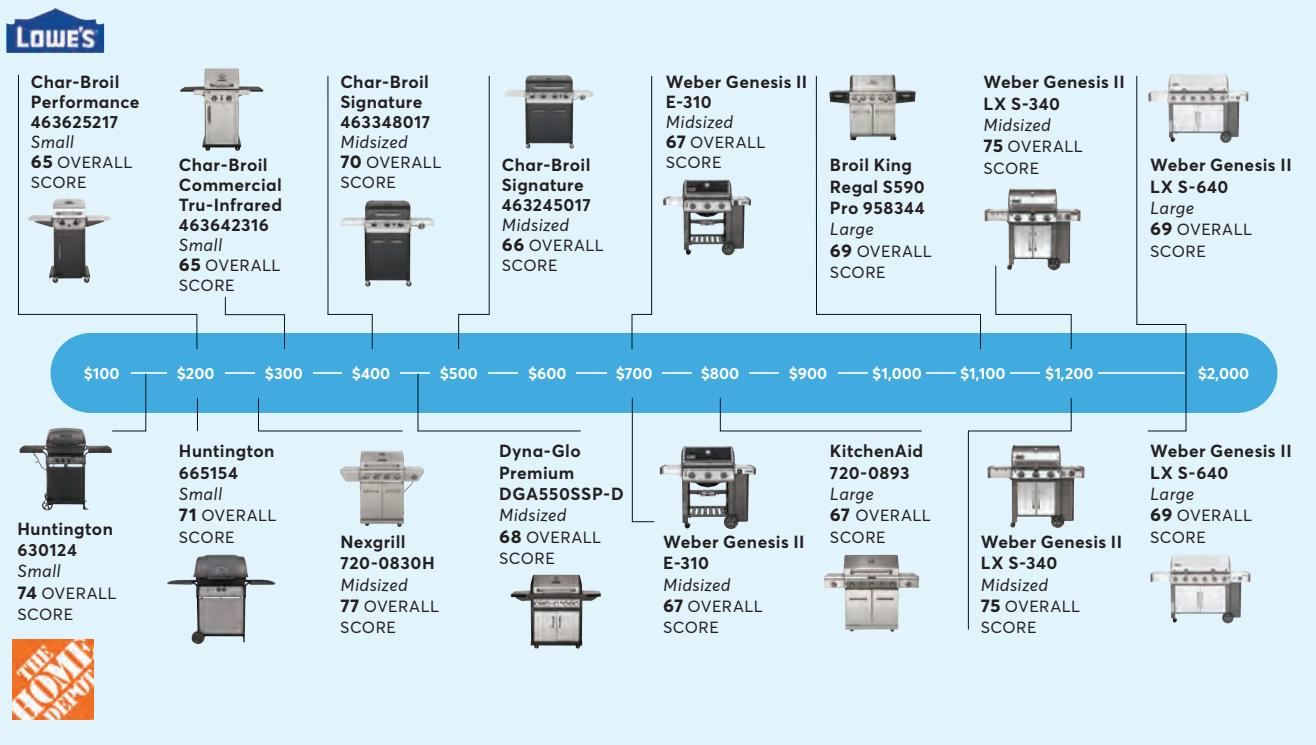
OVERALL
SCORE

This luxe model is loaded with features, including a rotisserie burner, a searing burner, storage drawers, and a side shelf with a built-in ice bucket for storing drinks. The rotary igniter is a compromise.

YOUR BEST BETS AT HOME DEPOT AND LOWE'S

These two home improvement stores ring up 42 percent of grill sales in the U.S. We cross-referenced the many models they stock against those that scored a Very Good in our ratings, to give you a handy

reference to their best offerings. Some models here are exclusive to Home Depot (KitchenAid, Nexgrill), some are exclusive to Lowe's (Char-Broil), and some sell at both and elsewhere (Weber).



Great Expectations

We test an exotic charcoal grill



WE AREN'T HERE to judge the cultural phenomenon that has formed around the Big Green Egg since its 1970s debut. Let's just say that this ceramic beast of a charcoal grill and smoker has hatched numerous copycat cookers and die-hard devotees, who call themselves Eggheads.

We can, however, evaluate its performance and help you answer the question: Does anyone really need a \$1,120 charcoal grill? For that price, you might expect an actual fossilized dinosaur egg, not a grill that looks like one. After all, some of our top-rated gas models cost a quarter of that price.

But the Egg isn't trying to be an alternative to gas grills, and frankly, it doesn't share much in common with the cooking experience of most charcoal grills, either. Rather than arranging coals to concentrate heat, you fill the lower hemisphere to capacity with lump

hardwood charcoal. Once the coals are going, the design starts to make sense. Cast-ceramic walls an inch thick and a heavy lid with a heatproof gasket team up to trap heat. That allows you to use the dampers to precisely control temperature.

Its design differences explain how the Egg is able to maintain low temperatures for long, slow cooking and also produce a roaring fire for searing steaks or grilling pizzas. We tested the Egg for both capabilities, and it performed extremely well.

For the low-and-slow test, our experts had no problem maintaining a temperature around 330° F for 6 hours. The impressive part is that we didn't need to add coal or adjust the dampers once we dialed in the sweet spot—exactly the kind of control you'd want for ribs or pulled pork. When we tested the Egg for high-heat cooking, we

recorded an average temperature of 850° F at the grates. That puts the Egg on par with the commercial broilers used in some of the world's best steakhouses, which allow chefs to char the outside of a porterhouse while leaving it perfectly medium-rare inside.

As nice as it is to be able to cook at both of these extremes, the burgers and brats you're likely to cook this summer need nothing more than an even-burning fire. The Egg heats evenly, but it won't do anything for your franks that a kettle grill wouldn't. And it costs about 10 times as much. All of which is to say, the Egg is definitely not for the casual summer griller. But if you grill or smoke meats year-round or you routinely make coal-fired pizza, it might be worth considering this extraordinarily rare breed.

—Paul Hope

Ratings > Hot Models Start by singling out grills that score high in our ratings, then narrow your selection to models that earned a good score on the features that matter most to you. In the store, compare construction quality.



		Brand & Model	Price	Overall Score	Test Results					Features			
Recommended	Rank				Evenness Performance	Preheat Performance	Temperature Range	Indirect Cooking	Convenience	Stainless Steel Grates	Coated Cast-Iron Grates	Igniter Type	Long-Warranty Burners
		SMALL GAS GRILLS Room for 18 or fewer burgers.											
💰	1	Huntington 630124	\$140	74	⬆️	⬆️	⬆️	⬆️	⬇️			Push-Button	
⬇️	2	Weber Spirit E-220 46310001	\$480	71	⬆️	⬆️	⬇️	⬆️	⬆️		•	Electronic	•
💰	3	Huntington 665154 (Home Depot)	\$200	71	⬆️	⬆️	⬆️	⬆️	⬇️		•	Electronic	
⬇️	4	Char-Broil SmartChef 463346017	\$800	71	⬆️	⬇️	⬆️	⬆️	⬇️		•	Electronic	•
	5	Weber Genesis II LX E-240	\$900	69	⬆️	⬇️	⬆️	⬆️	⬆️	•		Electronic	•
	6	Kenmore Patio 6256600 (Kmart)	\$270	68	⬆️	⬆️	⬆️	⬆️	⬇️	•	•	Electronic	
	7	Napoleon Terrace SE325PK	\$600	68	⬆️	⬆️	⬇️	⬆️	⬇️		•	Rotary	•
	8	Weber Genesis II E-210	\$500	67	⬆️	⬇️	⬇️	⬆️	⬆️		•	Electronic	•
	9	Nexgrill Evolution Infrared 720-0864M (Home Depot)	\$250	66	⬇️	⬆️	⬆️	⬆️	⬇️	•		Electronic	
	10	Char-Broil Commercial Tru-Infrared 463642316 [Item #748075] (Lowe's)	\$300	65	⬆️	⬇️	⬆️	⬆️	⬆️		•	Electronic	•
	11	Char-Broil Performance 463625217 [Item #803379] (Lowe's)	\$200	65	⬇️	⬆️	⬆️	⬆️	⬇️		•	Electronic	
	12	Grill Zone BG1762B [Item #204378] (True Value)	\$250	63	⬆️	⬆️	⬇️	⬆️	⬇️		•	Rotary	
	13	Blue Rhino UniFlame GBC1273SP	\$550	63	⬇️	⬆️	⬇️	⬆️	⬆️	•		Rotary	
	14	RevoAce GBC1729W (Walmart)	\$130	62	⬇️	⬆️	⬇️	⬆️	⬇️			Rotary	
	15	Nexgrill Evolution 720-0864M (Home Depot)	\$230	62	⬇️	⬆️	⬆️	⬆️	⬇️		•	Electronic	
	16	Kenmore 23673	\$275	61	⬇️	⬆️	⬆️	⬆️	⬇️		•	Electronic	•
	17	Dyna-Glo Dual Fuel DDGB730SNB-D	\$470	61	⬆️	⬇️	⬇️	⬆️	⬇️		•	Electronic	
	18	Landmann Falcon Series 42204	\$400	60	⬆️	⬆️	⬇️	⬇️	⬇️	•		Electronic	
	19	Broil King Monarch 320 931254	\$350	59	⬇️	⬆️	⬇️	⬆️	⬇️		•	Electronic	
	20	Broil King Baron 320 961554	\$300	56	⬇️	⬇️	⬆️	⬆️	⬇️		•	Electronic	
	21	Dyna-Glo DGP350NP-D	\$300	56	⬇️	⬆️	⬇️	⬇️	⬇️		•	Rotary	
	22	Uniflame GBC1405SP	\$195	55	⬆️	⬆️	⬇️	⬇️	⬇️			Push-Button	
	23	MHP Outdoor Grills WNK4DD-PS	\$975	53	⬆️	⬇️	⬇️	⬇️	⬇️			Electronic	
	24	Tec G-Sport FR	\$1,980	53	⬆️	⬇️	⬆️	NA	⬇️	•		Electronic	
	25	RevoAce GBC1708WDC (Walmart)	\$100	53	⬆️	⬆️	⬇️	⬇️	⬇️			Push-Button	

Grills That Fizzled, Not Sizzled

YOU WANT A GRILL that preheats quickly, so you can start those burgers sizzling. You hope for even heat, so you don't end up with some well-done and some medium-rare. But at the same time, you need a grill that delivers a wide temperature range, allowing you to cook a variety of foods. Grills scoring

40 or lower out of 100 earn a spot on our list of the worst tested. They weren't very hot after 10 minutes of preheating and didn't provide even heat, and their temperature range was limited. You can do better than the five stinkers listed at right:

Portable
NORTH AMERICAN OUTDOORS BB12919G \$140

Small
CADAC STRATOS 98700-23-01 \$300

Midsized
SABER CAST BLACK R67CC1117 \$1,400
MASTER FORGE ISLAND GRILL BG179A [ITEM #98162] \$1,200
FERVOR ICON 350S \$1,200

		Brand & Model	Price	Overall Score	Test Results					Features			
Recommended	Rank				Evenness Performance	Preheat Performance	Temperature Range	Indirect Cooking	Convenience	Stainless Steel Grates	Coated Cast-Iron Grates	Igniter Type	Long-Warranty Burners
		SMALL GAS GRILLS (Continued)											
	26	Char-Broil Advantage 463642116 [Item #748082] (Lowe's)	\$200	52	⬇️	⬆️	⬆️	⬆️	⬇️		•	Electronic	
	27	KitchenAid 720-0891B (Home Depot)	\$310	50	⬇️	⬆️	⬇️	⬆️	⬇️	•		Electronic	•
	28	Saber R33CC0312	\$800	47	⬆️	⬇️	⬇️	⬆️	⬇️	•		Electronic	•
	29	Cook Number Grill JAG24C	\$760	45	⬇️	⬇️	⬆️	⬆️	⬇️	•		Electronic	•
	30	Cadac Stratos 98700-23-01	\$300	40	🔴	⬆️	⬇️	⬆️	⬇️		•	Rotary	
		MIDSIZED GAS GRILLS Room for 18 to 28 burgers.											
💰	1	Nexgrill 720-0830H (Home Depot)	\$270	77	⬆️	⬆️	⬆️	⬆️	⬇️	•		Electronic	
✅	2	Weber Genesis II LX S-340	\$1,200	75	⬆️	⬆️	⬆️	⬆️	⬆️	•		Electronic	•
	3	Nexgrill Deluxe 720-0896B (Home Depot)	\$370	73	⬆️	⬆️	⬇️	⬆️	⬆️		•	Electronic	
	4	Even Embers GAS7540AS	\$200	73	⬆️	⬆️	⬇️	⬆️	⬇️		•	Rotary	•
	5	Char-Broil Advantage 463344116 [Item #748080] (Lowe's)	\$270	71	⬆️	⬆️	⬆️	⬆️	⬇️	•		Electronic	
	6	Char-Broil Signature 463348017 [Item #799960] (Lowe's)	\$400	70	⬆️	⬇️	⬆️	⬆️	⬇️	•		Electronic	•
	7	Weber Spirit E-320 46710001	\$550	70	⬆️	⬆️	⬇️	⬆️	⬆️		•	Electronic	•
	8	Kenmore 23683	\$400	69	⬆️	⬆️	⬆️	⬆️	⬇️	•		Electronic	•
	9	Hamilton Beach Grill Station 84241	\$400	69	⬆️	⬆️	⬆️	⬆️	⬇️		•	Rotary	
	10	Char-Broil Performance 463347017 [Item #799958] (Lowe's)	\$200	69	⬆️	⬆️	⬆️	⬆️	⬇️		•	Electronic	
	11	Napoleon LEX485RSIB	\$1,000	68	⬆️	⬆️	⬇️	⬆️	⬆️	•		Electronic	
	12	Dyna-Glo Premium DGA550SSP-D	\$450	68	⬇️	⬆️	⬇️	⬆️	⬇️	•		Electronic	
	13	Weber Genesis II E-310	\$700	67	⬆️	⬇️	⬇️	⬆️	⬆️		•	Electronic	•
	14	Char-Broil Commercial Tru-Infrared 463242515 [Item #606680] (Lowe's)	\$400	67	⬆️	⬇️	⬆️	⬆️	⬆️		•	Electronic	•

7 New Kids on the Grilling Block

BEL AIR

Bull Outdoor Products is known for sophisticated high-end stainless grills and outdoor kitchens, so this new brand from the company is a fun departure. The look is pure 1950s, inspired by the Chevrolet Bel Air, featuring painted metal in fire engine red, turquoise, or cream. Just know that the midsized Bel Air we tested scored mediocre overall. You'll find Bel Air grills at Home Depot, Menards, Walmart, and independent retailers for \$400 to \$600.

CHEF'S GRILL

You might have seen Sagittarius Sporting Goods' monster seven-burner stainless steel gas grills at Costco and on Amazon for \$1,000 and up. Now the company is bringing midsized models called Chef's Grill to Home Depot for \$400 to \$700. They have two or three burners and boast stainless and style. Both models we tested performed impressively overall but were only so-so in evenness.

EVEN EMBERS

These basic new grills cost less than \$300 and are painted metal, mostly. You'll see them at Tractor Supply. The Boltz Group, a relatively new company, makes them, and the \$200 midsized grill scored Excellent in several of our tests and Very Good overall.

		Brand & Model	Price	Overall Score	Test Results					Features			
Recommended	Rank				Evenness Performance	Preheat Performance	Temperature Range	Indirect Cooking	Convenience	Stainless Steel Grates	Coated Cast-Iron Grates	Igniter Type	Long-Warranty Burners
		MIDSIZED GAS GRILLS (Continued)											
	15	3 Embers GAS7480AS	\$500	67	👍	👍	👎	👎	👎	•		Rotary	•
	16	Nexgrill 720-0888N (Home Depot)	\$200	66	👎	👍	👎	👍	👎		•	Electronic	
	17	Char-Broil Gas2Coal Hybrid 463340516	\$300	66	👎	👍	👍	👍	👎		•	Electronic	
	18	Char-Broil Signature 463245017 [Item #799961] (Lowe's)	\$500	66	👍	👍	👎	👎	👍	•		Electronic	•
	19	Napoleon Prestige P500RSIB	\$1,400	66	👍	👎	👍	👍	👍	•		Rotary	•
	20	Chef's Grill RT-24175-1	\$450	66	👎	👍	👍	👎	👎	•		Electronic	
	21	Napoleon Rogue R425SBPK	\$750	65	👍	👎	👍	👍	👎		•	Rotary	•
	22	Monument Grills 38667	\$360	65	👎	👍	👎	👎	👍		•	Electronic	
	23	Dyna-Glo Smart Space Living DGB390SNP-D	\$250	65	👍	👍	👎	👍	👎		•	Electronic	
	24	Weber Summit S-470	\$1,900	65	👍	👍	👎	👍	👍	•		Rotary	•
	25	Cal Flame G3 A La Cart Plus	\$2,300	64	👎	👍	👍	👍	👎	•		Rotary	
	26	Napoleon Prestige P500	\$1,000	63	👍	👎	👍	👍	👎		•	Rotary	•
	27	Nexgrill Evolution 720-0882A (Home Depot)	\$380	63	👎	👍	👎	👍	👍	•		Electronic	
	28	Char-Broil Professional Tru-Infrared 463367016	\$400	63	👍	👎	👎	👍	👎		•	Electronic	•
	29	Kenmore 33492	\$370	63	👍	👍	👎	👎	👎	•		Electronic	•
	30	Kenmore 34611	\$215	62	👍	👍	👍	👎	👎		•	Electronic	
	31	Grill Zone BG2724B [Item #204380] (True Value)	\$300	62	👎	👍	👍	👍	👎		•	Rotary	
	32	Chef's Grill IR2818-1	\$650	62	👎	👍	👍	👍	👎	•		Electronic	
	33	Nexgrill 720-0896 (Home Depot)	\$300	62	👎	👍	👍	👍	👍		•	Electronic	
	34	Kenmore 45961	\$335	61	👎	👍	👍	👍	👎		•	Electronic	

SMOKE HOLLOW

This brand is made by Outdoor Leisure Products and sold at Home Depot, Sam's Club, and Walmart for less than \$200. The portable grill we tested got hot pretty fast and produced fairly even heat across the cooking surface, but the temperature range is limited. This is the first portable we've seen with a smoke tray, which holds wood chips to add a smoky flavor to food.

REVOACE

These models are new at Walmart. They're basic grills for \$250 or less, so forget about heavy-duty grates, and the tested models do not have an electronic igniter. The porcelain-coated lid on the \$100 RevoAce GBC1708WDC small grill we tested chipped in the course of our standard tests, leaving the exposed metal vulnerable to rust. For \$30 more, the RevoAce GBC1729W offers better performance and didn't chip during testing.

3 EMBERS

At \$500 to \$600, 3 Embers grills are a step up in price, features, and style from the Even Embers grills, also made by the Boltz Group. But although the 3 Embers construction quality is better than that of its less expensive cousins, the performance was not. The window in the lid is a nice touch, but once it gets smoked over you'll need to clean it to see what's cooking. You'll find this brand at Home Depot and Tractor Supply.

MONUMENT GRILLS

These stainless grills cost \$300 to \$500 at Home Depot and feature LED-lit controls for grilling after dusk, a small window on the lid, and other features usually found only on pricier grills. Monument says the grills are made in a factory that has been making grills for some of the top U.S. brands. Overall performance of the \$360 midsized grill was better than that of several models costing \$1,900 and up.

		Brand & Model	Price	Overall Score	Test Results					Features			
Recommended	Rank				Evenness Performance	Preheat Performance	Temperature Range	Indirect Cooking	Convenience	Stainless Steel Grates	Coated Cast-Iron Grates	Igniter Type	Long-Warranty Burners
		MIDSIZED GAS GRILLS (Continued)											
	35	Kenmore 46365	\$305	61	↓	↑	↑	↑	↓		•	Electronic	
	36	Char-Broil Commercial Tru-Infrared 463242715 [Item #606682] (Lowe's)	\$500	61	↑	↓	↓	↑	↑		•	Electronic	•
	37	Char-Broil Professional Series Tru-Infrared 463276016	\$500	61	↑	↓	↓	↑	↓		•	Electronic	•
	38	Kenmore 46372	\$340	60	↓	↑	↑	↑	↓		•	Electronic	
	39	Kenmore 23681	\$540	59	↓	↑	↓	↑	↑		•	Electronic	•
	40	Kokomo Grills KO-BAK4BG-C	\$2,240	59	↓	↓	↑	↑	↓	•		Rotary	•
	41	Delsol DSBQ25G-DSGB25	\$1,750	59	↓	↓	↑	↑	↓	•		Rotary	•
	42	Broilmaster Super Premium Series P3SX-PCB1	\$1,550	57	↓	↑	↑	↓	↓	•		Electronic	•
	43	Broil King Imperial 490 956884	\$1,600	56	↓	↑	↑	↑	↑	•		Electronic	•
	44	Aussie 2520-DS	\$200	56	↓	↑	↓	↓	↓			Electronic	
	45	Aussie Deluxe 6480-DS	\$600	55	↓	↑	↓	↓	↑	•		Electronic	
	46	Dyna-Glo DGF493BNP (Home Depot)	\$160	55	↓	↑	↓	↓	↓		•	Rotary	
	47	KitchenAid 720-0953 (Home Depot)	\$500	54	↓	↑	↑	↑	↓	•		Electronic	•
	48	Saber R50CC0312	\$1,200	52	↑	↓	↓	↑	↑	•		Electronic	•
	49	Napoleon Triumph T495SB	\$700	52	↓	↑	↓	↓	↑		•	Rotary	•
	50	Bel Air 79000	\$600	51	↓	↑	↓	↓	↓	•		Rotary	
	51	Member's Mark GR2210601-MM-00 (Sam's Club)	\$300	50	↓	↑	↓	↑	↑		•	Electronic	
	52	Weber Q 3200 57060001	\$420	50	↑	↑	↓	↓	↓		•	Electronic	
	53	American Outdoor Grill 24PCT	\$2,200	50	↓	↓	↑	↑	↓	•		Rotary	•
	54	Char-Griller Grillin' Pro 3001	\$225	50	↓	↑	↓	↑	↓		•	Electronic	
	55	KitchenAid 720-0954 (Home Depot)	\$700	50	↓	↑	↑	↑	↑	•		Electronic	•
	56	Urban Islands 4-Burner by Bull (Costco)	\$1,600	49	↓	↑	↑	↑	↓	•		Rotary	
	57	Dyna-Glo DGF510SBP (Home Depot)	\$200	46	↓	↑	↓	↓	↓		•	Rotary	
	58	Delta Heat DHGB32-C	\$2,930	46	↓	↓	↑	↓	↓	•		Rotary	•
	59	Cadac Stratos 3 98700-33-01	\$400	43	↓	↑	↓	↑	↓			Rotary	
	60	Summerset Sizzler Series CART-SIZ32	\$1,950	43	↓	↓	↑	↑	↓	•		Rotary	
	61	Saber Cast Black R50CC0617	\$1,000	41	↓	↓	↓	↑	↓	•		Electronic	•
	62	Saber Cast Black R67CC1117	\$1,400	38	↓	↓	↓	↓	↑	•		Electronic	•
	63	Master Forge Island Grill BG179A [Item #98162] (Lowe's)	\$1,200	33	↓	↓	↓	↑	↓	•		Electronic	•
	64	Fervor Icon 350S	\$1,200	28	↓	↓	↓	↓	↓		•	Rotary	
		LARGE GAS GRILLS Room for 28 or more burgers.											
	1	Kenmore 16136	\$600	72	↑	↑	↑	↑	↓	•		Electronic	•
✓	2	Napoleon Prestige Pro 665RSIB	\$3,200	72	↑	↓	↑	↑	↓	•		Rotary	•

		Brand & Model	Price	Overall Score	Test Results					Features			
Recommended	Rank				Evenness Performance	Preheat Performance	Temperature Range	Indirect Cooking	Convenience	Stainless Steel Grates	Coated Cast-Iron Grates	Igniter Type	Long-Warranty Burners
		LARGE GAS GRILLS (Continued)											
	3	Weber Genesis II LX S-440	\$1,600	70	⬆️	⬆️	⬆️	⬇️	⬆️	•		Electronic	•
	4	Broil King Regal S590 Pro 958344	\$1,100	69	⬇️	⬆️	⬆️	⬆️	⬆️	•		Electronic	•
	5	Weber Genesis II LX S-640	\$2,000	69	⬆️	⬆️	⬇️	⬆️	⬆️	•		Electronic	•
	6	Napoleon LEX730RSBIPSS	\$1,800	68	⬆️	⬆️	⬇️	⬆️	⬇️	•		Rotary	•
	7	Weber Summit E-670	\$2,500	68	⬆️	⬆️	⬇️	⬆️	⬆️	•		Electronic	•
	8	Weber Genesis II E-410	\$900	68	⬆️	⬇️	⬇️	⬆️	⬆️		•	Electronic	•
	9	KitchenAid 720-0893	\$800	67	⬆️	⬆️	⬇️	⬆️	⬇️	•		Rotary	•
	10	Char-Broil Performance 463245917 [Item #803378] (Lowe's)	\$350	66	⬆️	⬆️	⬆️	⬆️	⬇️		•	Electronic	
	11	Grill Zone BG2615B [Item #204381] (True Value)	\$400	65	⬆️	⬆️	⬇️	⬆️	⬇️	•		Rotary	
	12	Weber Genesis II E-610	\$1,300	64	⬆️	⬇️	⬇️	⬆️	⬆️		•	Electronic	•
	13	Bradley Grill Deluxe BG50506	\$970	62	⬇️	⬆️	⬇️	⬆️	⬇️	•		Rotary	
	14	Broil King Sovereign XLS 90 988844	\$900	61	⬇️	⬇️	⬆️	⬆️	⬇️	•		Electronic	•
	15	Broil King Imperial 590 958884	\$1,800	60	⬇️	⬇️	⬆️	⬆️	⬆️	•		Electronic	•
	16	Dyna-Glo DGE530BSP-D	\$550	59	⬆️	⬆️	⬇️	⬆️	⬇️	•		Electronic	
	17	Weber Summit S-650	\$1,900	57	⬇️	⬆️	⬇️	⬆️	⬆️	•		Rotary	•
	18	Urban Islands 5-Burner by Bull (Costco)	\$1,900	54	⬇️	⬆️	⬆️	⬆️	⬇️	•		Rotary	
	19	Saber R67SC0012	\$1,900	51	⬆️	⬇️	⬇️	⬆️	⬆️	•		Electronic	•
	20	Blaze BLZ-5-LP + BLZ-5-CART	\$2,115	48	⬇️	⬆️	⬆️	⬆️	⬇️	•		Rotary	•
	21	Kenmore 20153	\$1,835	44	⬇️	⬆️	⬇️	⬇️	⬇️	•		Rotary	•
	22	Fervor Icon 655S	\$2,150	43	⬇️	⬇️	⬇️	⬆️	⬇️		•	Rotary	
		PORTABLE GAS GRILLS											
	1	Blue Rhino CrossFire GBT1508M	\$110	79	⬆️	⬇️	⬆️	NA	NA			Electronic	
	2	Cuisinart CGG-306	\$200	67	⬆️	⬆️	⬇️	⬇️	NA	•		Rotary	
	3	Nexgrill 820-0033	\$120	65	⬆️	⬆️	⬇️	⬇️	NA	•		Rotary	
	4	Weber Q 2200 54060001	\$250	60	⬆️	⬇️	⬇️	NA	NA		•	Electronic	
	5	Cuisinart CGG-200	\$180	54	⬇️	⬆️	⬇️	NA	NA		•	Rotary	
	6	Smoke Hollow Vector Series VTSS	\$155	54	⬆️	⬆️	⬇️	⬇️	NA			Push-Button	
	7	Weber Q 1000 50060001	\$170	48	⬇️	⬇️	⬇️	NA	NA		•	Push-Button	
	8	Char-Broil Tru-Infrared Grill2Go X200 12401734	\$130	45	⬇️	⬆️	⬇️	NA	NA	•		Push-Button	
	9	North American Outdoors BB12919G	\$140	36	⬇️	⬇️	⬇️	NA	NA		•	Push-Button	

HOW WE TEST: Overall Score combines results from our tests for Evenness, Preheat, Temperature Range, Indirect Cooking, and Convenience. Evenness indicates how even the temperature

is across the cooking surface during preheating and while using the main burners' lowest and highest settings. Preheat measures how hot the cooking surface is after 10 minutes, indicating

how fast the grill reaches its maximum temperature. Temperature Range reflects the span between the lowest and highest settings using all main burners. Indirect Cooking tells you how

well the grill will slow cook food when it's not placed directly over flames and using a burner or two. Convenience is our evaluation of basic features. Price is approximate retail.

Road Test

We conduct more than 50 tests on each vehicle at our 327-acre Auto Test Center. For complete road tests, go to CR.org/cars.



Turbo-Boosted Brilliance

*The redesigned **Porsche 718 Boxster** proves to be every inch a sensational sports car.*

AS PART OF Porsche's redesign of the Boxster roadster (and the Cayman, the coupe version), it traded the six-cylinder engines for four-cylinder turbos.

Even with the changes, this mid-engine, two-seat sports car is as spectacular to drive as ever. We miss the old six cylinder's high-rev wail, but better fuel economy and more power are a welcomed result.

Acceleration is impressive from the 300-hp base model, which hits 60 mph in a scant 4.4 seconds with the optional automatic transmission. There's a slight delay when

you push down on the gas pedal for the power to arrive, most noticeable at low speeds. Still, the engine delivers a guilt-free 26 mpg overall. We don't see the need to pay an extra \$12,400 to get the "S" model and its 350-hp, 2.5-liter turbo-four.

The Boxster's handling hasn't been diluted even one ounce in this redesign. Steering response is near-telepathic, carving into corners with immediacy. The taut suspension provides tenacious, road-holding grip without punishing occupants with an unduly harsh ride.

The cloth top raises or lowers in about 10 seconds—even when moving above 40 mph.

The low-slung, difficult-to-enter cabin uses premium materials. The firm seats are supportive, but wider drivers will feel confined by the side bolsters. Front and rear trunks provide enough luggage space for a weekend trip—preferably one with twisty two-lane roads.

SPORTS CARS

Porsche 718 Boxster

OVERALL SCORE **82**

ROAD-TEST SCORE **95**

HIGHS

Handling, acceleration, braking, quick top operation that works on the move, fit and finish

LOWS

Ride, noise, access, visibility with closed top, some controls

POWERTRAIN

300-hp, 2.0-liter 4-cylinder turbocharged engine; 7-speed automated manual transmission; rear-wheel drive

FUEL

26 mpg

PRICE AS TESTED

\$69,790



Roadster Revival

*To create the **Fiat 124 Spider**, the Italian carmaker started with a Mazda MX-5 Miata and gave it a new body, a turbo engine, and a modified suspension.*

DON'T DISMISS the 124 Spider out of hand because other Fiats have performed poorly in our tests. This car is more Mazda than Fiat. In fact, under that retro-inspired body is essentially the Miata's nimble, fun-to-drive essence.

The Spider's 1.4-liter turbocharged four-cylinder engine revs willingly and delivers good midrange power while returning a solid 31 mpg overall. But the engine sound is uninspiring: It's more rattle than aria. The six-speed manual engages each gear without a fuss, and the optional six-speed automatic

doesn't dilute the driving experience too much.

As with the Miata, the Spider's responsive steering provides good driver feedback, making the car feel playful yet predictable. The ride is compliant for a sports car, but there's no escaping the frequent jittering transmitted on rough roads. Even with the top raised, wind and road ruckus is relentless above 60 mph. Raising and lowering the manual soft top is a simple one-arm operation that can be done without turning around.

The two-seat interior is very confining, with hardly any storage space. Packing light is essential because the trunk can handle only a few soft bags. The cabin lacks any Italian flair, and the Mazda controls take some getting used to.

A rearview camera isn't available on the Miata, but it's optional on the base Fiat 124 and standard on higher trims.

SPORTY CARS

Fiat 124 Spider

OVERALL SCORE **70**

ROAD-TEST SCORE **76**

HIGHS

Agility, easy manual top, fuel economy

LOWS

Ride, noise, tight quarters, access

POWERTRAIN

160-hp, 1.4-liter 4-cylinder turbocharged engine; six-speed manual transmission; rear-wheel drive

FUEL

31 mpg

PRICE AS TESTED

\$29,985



Firing on All Cylinders

The redesigned **Honda CR-V** cruises toward the front of the small-SUV class, limited by a lack of standard safety features on the base trim.

THE SEGMENT SALES leader, the Honda CR-V, has been redesigned, and the result is better fuel economy, improved safety, sharper handling, and an upgraded interior.

The CR-V is small enough to navigate through tight parking lots, yet roomy enough inside to capably fit five adults. Plentiful cabin storage makes it a very functional vehicle. Visibility is good, except to the rear corners.

We tested both LX and EX trim CR-Vs. The base LX's 2.4-liter engine is adequately powerful and returned 27 mpg

overall; the EX's 1.5-liter turbo returned 28 mpg overall. Both mileage figures are the best among nonhybrid small SUVs, but the turbo is peppier to drive.

The firm ride is unlikely to elicit complaints. Handling is responsive and secure.

The cabin is quieter than it has ever been, but some competitors provide a more relaxing space. The LX's front seats have limited adjustments; those in the EX are much better thanks to power adjustments, including four-way lumbar support, that let you fine-tune your driving position. The rear seat is very roomy, and large door openings ease access. The LX's infotainment system is easy to use; EX trim and above get a more complicated and distracting touch-screen system.

Honda doesn't make advanced safety gear standard on all CR-Vs, which hurts its Overall Score and ranks it below the Toyota RAV4 in our ratings. All things considered, we think it's worth the extra \$2,650 to get the EX version.

COMPACT SUVs

Honda CR-V (LX/EX)

OVERALL SCORE

77/77

ROAD-TEST SCORE 83/82

HIGHS

Fuel economy, roomy interior

LOWS

Cumbersome infotainment system on EX version and up

POWERTRAIN

LX: 184-hp, 2.4-liter four-cylinder; EX: 190-hp, 1.5-liter four-cylinder turbo engine; continuously variable transmission; all-wheel drive

FUEL

27 mpg/28 mpg

PRICE AS TESTED

\$26,245/\$28,935



Rescue From the Ordinary

The updated **Ford Escape** is a nimble ride with a luxuriously quiet cabin. But fuel economy and acceleration disappoint.

IF YOUR TASTE in small SUVs leans more toward maximum fun than maximum space, the Escape might be right for you. Yet it trails the competition in some key areas.

This fleet-footed SUV's taut and agile handling makes it the category's most entertaining-to-drive choice. The ride is steady and the quiet cabin adds a premium feel.

The new turbo engine and automatic transmission combine to deliver smooth power, but at over 10 seconds from 0-60 mph, it accelerates slower than most rivals. And at 23 mpg overall, it's

also thirstier than many of them. A new start/stop system intended to aid fuel economy compromises air conditioning during stops, making the cabin humid. A 2.0-liter turbo engine is available for \$1,345. It bolsters performance but not mileage.

The cabin is a blend of cheap and upscale touches. The cloth seats are short on support, and the low, flat rear seat fails to provide adequate thigh support.

Ford's simple to operate yet versatile Sync 3 infotainment system is part of a \$1,395 technology package, and it's a worthy upgrade.

A long list of features and options, including a hands-free tailgate and self-steering parking assist, can be had on the top-trim Titanium. But such indulgences bump the price to around \$37,000, though discounts are common. Advanced safety equipment such as forward-collision warning is available only on the Titanium.

COMPACT SUVs

Ford Escape

OVERALL SCORE

71

ROAD-TEST SCORE 75

HIGHS

Agile handling, quietness, easy to use infotainment system

LOWS

Unsupportive cloth seats, flat and low rear seat, relatively expensive, lackluster fuel economy, advanced safety features not readily available

POWERTRAIN

179-hp, 1.5-liter 4-cylinder turbocharged engine; 6-speed automatic transmission; all-wheel drive

FUEL

23 mpg

PRICE AS TESTED

\$29,630

Ratings > For Carrying the Brood or Lightening Your Mood

Small SUVs are great all-around work and family vehicles, but for a needed break from the grind, these sporty cars fit the bill.



	Make & Model	Price	Overall Score	Survey Results		Safety	Road-Test Results											
Recommended		As Tested		Predicted Reliability	Owner Satisfaction	Front-Crash Prevention	Road-Test Score	Overall MPG	Dry Braking, 60-0 MPH, Ft.	Acceleration, 0-60 MPH, Sec.	Avoidance-Maneuver Speed, MPH	Routine Handling	Ride	Noise	Seat Comfort, Front/Rear	Controls	Cargo Volume, Cu.Ft.	
	COMPACT SUVs																	
✓	Subaru Forester 2.5i Premium	\$27,145	83	⬆️	⬆️	Opt.	85	26	127	8.7	52.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	35.5	
✓	Toyota RAV4 XLE	\$29,014	79	⬆️	⬇️	Std. / ⬆️	75	24	135	9.3	51.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	37.0	
✓	Honda CR-V LX (2.4L)	\$26,245	77	⬇️	⬆️	Opt.	83	27	133	8.6	52.5	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	36.0	
✓	Honda CR-V EX (1.5T)	\$28,935	77	⬇️	⬆️	Opt.	82	28	137	8.2	52.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	36.0	
✓	Kia Sportage LX (2.4L)	\$26,720	76	⬆️	⬆️	Opt.	78	23	128	9.6	52.5	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	29.5	
✓	Hyundai Tucson Sport (1.6T)	\$28,670	75	⬇️	⬆️	Opt.	79	26	128	8.4	53.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	29.5	
✓	Hyundai Tucson SE (2.0L)	\$25,920	73	⬇️	⬆️	Opt.	76	24	129	11.0	54.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	29.5	
✓	Ford Escape SE (1.5T)	\$29,630	71	⬇️	⬇️	Opt.	75	23	132	10.1	50.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	34.0	
✓	Nissan Rogue SV	\$29,920	71	⬆️	⬇️	Opt.	74	24	134	9.5	54.0	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	31.5	
	Mitsubishi Outlander SEL (4-cyl.)	\$28,405	60	⬇️	⬇️	Opt.	59	24	132	10.0	50.5	⬇️	⬆️	⬆️	⬆️ / ⬆️	⬆️	32.5	
	Jeep Cherokee Latitude (4-cyl.)	\$27,490	47	⬇️	⬇️	Opt.	58	22	138	10.9	51.5	⬆️	⬆️	⬆️	⬆️ / ⬆️	⬆️	31.0	

	Make & Model	Price	Overall Score	Survey Results		Safety	Road-Test Results											
Recommended		As Tested		Predicted Reliability	Owner Satisfaction	Front-Crash Prevention	Road-Test Score	Overall MPG	Dry Braking, 60-0 MPH, Ft.	Acceleration, 0-60 MPH, Sec.	Acceleration, Quarter Mile, Sec.	Avoidance-Maneuver Speed, MPH	Routine Handling	Ride	Noise	Controls	Driving Position	
	SPORTS/SPORTY CARS OVER \$40,000 Equipped with manual transmission																	
	✓	BMW M240i	\$50,400	92	⬆️	⬆️	Opt.	98	25	115	5.2	13.8	58.5	⬆️	⬇️	⬆️	⬆️	⬆️
	✓	Chevrolet Corvette Stingray 3LT	\$73,260	83	⬇️	⬆️	NA	92	20	107	4.3	12.6	57.5	⬆️	⬇️	⬇️	⬆️	⬇️
	✓	Porsche 718 Boxster (base, AT)	\$69,790	82	⬇️	⬆️	Opt.	95	26	108	4.4	13.0	59.0	⬆️	⬇️	⬇️	⬇️	⬇️
✓	Audi TT 2.0T (AT)	\$50,600	81	⬆️	⬆️	NA	84	26	113	6.3	14.8	58.0	⬆️	⬇️	⬇️	⬇️	⬆️	
SPORTS/SPORTY CARS UNDER \$40,000 Equipped with manual transmission																		
✓	Mazda MX-5 Miata Club	\$29,905	79	⬆️	⬆️	NA	80	34	124	6.7	15.1	57.5	⬆️	⬇️	⬇️	⬇️	⬇️	
✓	Subaru BRZ Premium	\$27,117	73	⬇️	⬇️	NA	79	30	126	7.2	15.6	56.0	⬆️	⬇️	⬇️	⬆️	⬆️	
✓	Toyota 86	\$25,025	73	⬇️	⬇️	NA	78	30	126	7.2	15.5	56.5	⬆️	⬇️	⬇️	⬆️	⬆️	
	Volkswagen GTI Autobahn	\$31,730	71	⬇️	⬆️	Opt.	82	29	132	6.6	15.2	55.0	⬆️	⬇️	⬆️	⬆️	⬆️	
	Fiat 124 Spider Lusso	\$29,985	70	⬇️	⬆️	NA	76	31	121	7.1	15.4	56.0	⬆️	⬇️	⬇️	⬇️	⬇️	
	Mini Cooper S	\$29,945	66	⬇️	⬆️	Opt.	81	30	130	7.2	15.5	56.0	⬆️	⬇️	⬇️	⬆️	⬆️	
	Fiat 500 Abarth	\$26,050	52	⬇️	⬇️	NA	66	28	125	8.0	16.1	55.5	⬆️	⬇️	⬇️	⬇️	⬇️	
	Ford Fiesta ST	\$24,985	52	⬇️	⬇️	NA	74	29	118	7.3	15.6	57.0	⬆️	⬇️	⬇️	⬇️	⬇️	
	Ford Focus ST	\$28,270	51	⬇️	⬇️	NA	74	26	122	6.6	15.1	53.0	⬆️	⬇️	⬇️	⬆️	⬇️	

SCORES IN CONTEXT: Recommended models did well in our Overall Score, which factors in Road-Test Results, Predicted Reliability, Owner Satisfaction, and Safety performance, which includes crash-test results

and the availability of front-crash prevention features, such as forward-collision warning and automatic emergency braking at city or highway speeds. For these systems, NA means

no such system is offered; Opt. means it's available on some versions but not necessarily on the one we tested; and models with standard systems are rated from 1 to 5 based on how many of these features are standard.

We now deduct points from the Overall Score if a vehicle's shifter is confusing, lacks fail-safes, or is difficult to operate. For full ratings, go to [CRL.org/cars](https://www.crl.org/cars).

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Get the Hook

We think we'll be passing on these dubious offers

In the Eye of the Beholder
This gives new meaning to the saying "Beauty is only skin deep."
Submitted by
Eric Chan of
Chatham, N.J.



Buzzed & Bewildered
Hankering for a seventh cup of morning joe? Then you've got

more problems than this freebie can fix.
Submitted by
Walter Taffarello of
West New York, N.J.



Subpar
If that's Subway's idea of a deal, we'll be lunching elsewhere.
Submitted by
Larry Birchfield of
Raleigh, N.C.



Locally Sourced
Should nonresidents be thrown back into the pond?
Submitted by
Tom Kenzik of Mount Pleasant, S.C.



Be on the lookout for goofs and glitches like these. Share them with us—by email at SellingIt@cro.consumer.org; by mail to Selling It, Consumer Reports, 101 Truman Ave., Yonkers, NY 10703; or by social media using the hashtag #CRSellingIt—and we might publish yours. Please include key information, such as the publication's name and date.

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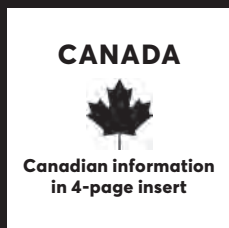
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Canada Extra

Autos **32a**
Headphones **32b**
Grills **32c**
Vacuums **32d**
Contact Info **32d**

How to Use the Canada Extra Section

EVERY MONTH, Canada Extra provides Canadian pricing and availability information about products tested for that issue. The ratings in this section are based on this month's reports, but they narrow your choices to the products that are sold in Canada.

You can use this section in either of two ways: Start with the main report, read about the products that interest you, and turn to this section to find whether they're sold—and for what price—in Canada. Or start here, find products sold

in Canada whose price and overall score appear promising, and read more about them in the main report and full ratings chart; page numbers appear with each Canadian report. (For some products, the Canadian model designation differs slightly from the one used in the U.S.)

In most cases, the prices we list here are the approximate retail in Canadian dollars; manufacturers' list prices are indicated by an asterisk (*). Check marks identify CR Best Buys or recommended

products in the U.S. ratings. "NA" in a chart means that information wasn't available from the manufacturer. We include, in the Contact Info list on page 32d, the manufacturer's phone number and web address in Canada so that you can call or go online to get information on a model you can't find in the stores. (Many products that aren't available in Canadian stores can be bought online.)

We appreciate your support, but we don't take it for granted. Please write to

CanadaExtra@cu.consumer.org and tell us what you think. We can't reply to every email or implement every suggestion, but with your help we'll try to keep growing to serve your needs.

\$ CR Best Buy Products
with this icon offer the best combination of performance and price. All are recommended.

✓ Recommended Models
with this designation perform well and stand out for reasons we note.

Autos

All of the tested vehicles are available in Canada. **Report and Ratings, pages 58-60**

PORSCHE
718 BOXSTER
PRICE AS TESTED
\$69,790 (U.S.)

82

OVERALL
SCORE



HONDA
CR-V (1.5T)
PRICE AS TESTED
\$28,935 (U.S.)

77

OVERALL
SCORE



Make & Model	Price Range	Acceleration (Sec.)				Fuel Economy (Liters per 100 km)		
		0-50 km/h	0-100 km/h	80-100 km/h	500 Meters	City Driving	Highway Driving	Overall
COMPACT SUVs								
Honda CR-V (1.5T)	\$26,890–\$38,290	3.5	8.6	3.8	18.9	11.9	6.4	8.5
Ford Escape	\$25,099–\$35,999	3.7	10.7	4.5	20.4	15.2	7.5	10.4
SPORTS/SPORTY CAR OVER \$40,000								
Porsche 718 Boxster	\$65,100–\$79,200	1.8	4.6	2.7	14.9	13.2	6.5	9.1
SPORTS/SPORTY CAR UNDER \$40,000								
Fiat 124 Spider	\$33,495–\$39,495	2.4	7.5	3.2	17.6	10.3	5.9	7.5

Headphones

Twenty-five of the tested headphones are available, including 21 of the recommended models.
Report and Ratings, pages 18-21



		Brand & Model	Price	Overall Score
Rec.	Rank			
NOISE-CANCELING PORTABLE HEADPHONES				
✓	1	Bose QuietControl 30	\$400	87
✓	2	Bose QuietComfort 20i	\$280	74
NOISE-CANCELING HOME/STUDIO-STYLE HEADPHONES				
✓	1	Bose QuietComfort 35	\$450	87
✓	2	Sony h.ear MDR-100ABN	\$470	86
✓	3	Bose QuietComfort 25	\$330	83
✓	4	Audio-Technica SonicPro ATH-MSR7NC	\$425	81
✓	5	Sony MDR-1000X	\$500	75
✓	8	PSB Speakers M4U 2	\$300	73
\$	9	Beats by Dre Studio Wireless	\$400	72
✓	10	Parrot Zik 3	\$490	69
SPORTS HEADPHONES				
✓	3	Beats by Dre powerbeats2 wireless	\$195	76
✓	4	Bose SoundSport	\$220	76
\$	5	Jabra Sport Coach Wireless	\$170	71
✓	6	Jabra Sport Pulse Wireless	\$250	71
✓	7	Jaybird Freedom F5	\$200	71
✓	8	Jaybird X3	\$160	71
✓	10	Soul Electronics Run Free Pro	\$150	71
✓	11	JBL by Harman Under Armour	\$200	66
\$	12	MEE Audio X7 Plus	\$95	66
\$	14	Philips ActionFit Sport SHQ2305/27	\$30	66
TRUE WIRELESS EARPHONES				
✓	1	Jabra Elite Sport	\$280	71
	2	Samsung Gear IconX	\$280	60
	3	Apple AirPods	\$220	56
	4	Bragi Dash	\$400	51
	6	SOL Republic Amps Air	\$180	41

Grills

Fifty-one of the tested grills are available, including 3 of the recommended models.

Report and Ratings, pages 46-57

		Brand & Model	Price	Overall Score
Rec.	Rank			
SMALL GAS GRILLS Room for 18 or fewer burgers.				
✓	2	Weber Spirit E-210 46310001	\$600	71
	5	Weber Genesis II LX E-240	\$1,300	69
	7	Napoleon Terrace SE325PK	\$600	68
	8	Weber Genesis II E-210	\$700	67
	10	Char-Broil Commercial Tru-Infrared 463642316 [Item #748075] (Lowe's)	\$315	65
	17	Dyna-Glo Dual Fuel DDGB730SNB-D	\$750	61
	19	Broil King Monarch 320 931254	\$580	59
	20	Broil King Baron S320 921554	\$550	56
	21	Dyna-Glo DGP350NP-D	\$450	56
	27	KitchenAid 720-0891B (Home Depot)	\$330	50
	28	Saber R33CC0312	NA	47
MIDSIZED GAS GRILLS Room for 18 to 28 burgers.				
✓	2	Weber Genesis II LX S-340	\$1,700	75
	7	Weber Spirit E-330 46710001	\$800	70
	11	Napoleon LEX485RSIB	\$1,150	68
	12	Dyna-Glo Premium DGA550SSP-D	\$720	68
	13	Weber Genesis II E-310	\$900	67
	14	Char-Broil Commercial Tru-Infrared 466242515 [Item #606680] (Lowe's)	\$420	67
	17	Char-Broil Gas2Coal Hybrid 466370516 [Item #748074]	\$280	66
	19	Napoleon Prestige P500RSIB	\$1,500	66
	21	Napoleon Rogue R425SBPK	\$900	65
	23	Dyna-Glo Smart Space Living DGB390SNP-D	\$440	65
	24	Weber Summit S-470	\$2,750	65
	26	Napoleon Prestige P500	\$1,200	63
	27	Nexgrill Evolution 720-0882A (Home Depot)	\$600	63
	36	Char-Broil Commercial Tru-Infrared 466242715 [Item #606682] (Lowe's)	\$525	61
	42	Broilmaster Super Premium Series P3SX-PCB1	NA	57

		Brand & Model	Price	Overall Score
Rec.	Rank			
MIDSIZED GAS GRILLS (Continued)				
	43	Broil King Imperial 490 956884	\$1,650	56
	47	KitchenAid 720-0953A (Home Depot)	\$550	54
	48	Saber R50CC0312	NA	52
	49	Napoleon Triumph T495SB	\$750	52
	52	Weber Q 3200 57060001	\$550	50
	55	KitchenAid 720-0954A (Home Depot)	\$680	50
	61	Saber Cast Black R50CC0617	NA	41
	62	Saber Cast Black R67CC1117	NA	38
	63	Master Forge Island Grill BG179A [Item #98162] (Lowe's)	\$1,200	33
LARGE GAS GRILLS Room for 28 or more burgers.				
✓	2	Napoleon Prestige Pro 665RSIB	\$3,000	72
	3	Weber Genesis II LX S-440	\$2,000	70
	4	Broil King Regal S590 Pro 958344	\$1,400	69
	5	Weber Genesis II LX S-640	\$2,600	69
	6	Napoleon LEX730RSBIPSS	\$1,900	68
	7	Weber Summit E-670	\$3,200	68
	8	Weber Genesis II E-410	\$1,200	68
	9	KitchenAid 720-0893	\$1,000	67
	12	Weber Genesis II E-610	\$1,600	64
	14	Broil King Sovereign XLS 90 988844	\$1,000	61
	15	Broil King Imperial 590 958884	\$1,800	60
	16	Dyna-Glo DGE530BSP-D	\$620	59
	19	Saber R67SC0012	NA	51
PORTABLE GAS GRILLS				
	1	Blue Rhino CrossFire GBT1508M	\$100	79
	4	Weber Q 2200 54060001	\$350	60
	8	Char-Broil Tru-Infrared Grill2Go X200 1341850	\$140	45

Vacuums

Seventeen of the tested vacuums are available. All are recommended models.

Report and Ratings, pages 9-14

Rec.	Rank	Brand & Model	Price	Overall Score
UPRIGHT BAGGED				
\$	6	Hoover WindTunnel Max UH30600	\$220	70
✓	11	Hoover WindTunnel T-Series Pet UH30310	\$190	65
✓	12	Hoover WindTunnel T-Series UH30300	\$220	65
UPRIGHT BAGLESS				
\$	2	Hoover WindTunnel T-Series Rewind Bagless UH70120	\$180	69
✓	5	Shark Rotator Professional Lift-Away NV500C	\$270	65
✓	9	Shark Navigator Lift-Away NV351C	\$180	63
STICK VACUUMS				
✓	2	Bissell Air Ram 1984	\$250	91
✓	3	Shark Rocket Complete HV382	\$400	90
✓	4	Shark Rocket DeluxePro TruePet HV321	\$315	78

Rec.	Rank	Brand & Model	Price	Overall Score
STICK VACUUMS (Continued)				
✓	5	Black+Decker Smartech HSVJ520JMBF27	\$250	77
✓	6	Dyson V6+ Cord-Free	\$400	77
✓	10	Miele Swing H1 QuickStep*	\$250	74
HANDHELD VACUUMS				
✓	1	Shark Pet Perfect II SV780	\$100	79
✓	2	Eureka Easy Clean 71B	\$80	71
✓	3	Bissell Pet Hair Eraser 33A1*	\$50	65
ROBOTIC VACUUMS				
✓	2	Roomba 880	\$880	87
✓	4	Roomba 980	\$900	79
>	For the complete list of more than 170 vacuums ratings, CRO subscribers can go to CR.org/vacuums0617 .			

Contact Info

How to reach manufacturers in Canada.

Apple
800-692-7753
apple.com/ca

Audio-Technica
800-667-3745
audio-technica.com

Beats by Dre
beatsbydre.com/ca

Bissell
800-446-1071
canada.bissell.com

Black+Decker
blackanddecker.ca

Blue Rhino
bluerhino.com

Bose
800-869-2114
bose.ca/en_ca

Bragi
bragi.com

Broil King
800-265-2150
broilkingbbq.com

Broilmaster
800-851-3153
broilmaster.com

Char-Broil
866-239-6777
charbroil.ca

Dyna-Glo
877-447-4768
ghpgroupinc.com

Dyson
877-397-6622
dysoncanada.ca

Eureka
800-282-2886
eurekavacuum.ca

Hoover
800-944-9200
hoover.ca

Jabra
800-826-4656
jabra.ca

Jaybird
866-934-5644
jaybirdsport.com

JBL by Harman
514-457-2555
jbl.com

KitchenAid
Contact Home Depot

Master Forge
Contact Lowe's
MEE Audio
626-965-1008
meeaudio.com

Miele
800-565-6435
miele.ca

Napoleon
napoleongrills.com

Nexgrill
800-913-8999
nexgrill.com

Parrot
877-972-7768
parrot.com

Philips
888-381-0749
philips.ca

PSB
905-831-6555
psbspeakers.com

Roomba
877-855-8593
irobot.com

Saber
888-947-2237
sabergrills.com

Samsung
800-726-7864
samsung.com/ca

Shark
877-581-7375
sharkclean.com

SOL Republic
877-400-0310
solrepublic.com

Sony
416-499-1414
sony.ca

Soul Electronics
soulelectronics.com

Weber
800-446-1071
webercanada.ca