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OCTOBER 2014 | CONSUMERREPORTS.ORG

# ConsumerReports®

## 2015's RED HOT RIDES

**Our sneak peek at the  
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**PLUS**

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- A look back at 2014's duds

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\*\*Between 7/1/13 and 9/30/13, the average estimated savings off MSRP presented by TrueCar Certified Dealers to users of the Consumer Reports Build & Buy Car Buying Service, based on users who configured virtual vehicles and subsequently purchased a new vehicle of the same make and model listed on the certificate from Certified Dealers, was \$2,919. Your actual savings may vary. SERVICE NOT AVAILABLE IN CANADA.



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## TELL US WHAT YOU THINK

## Notice something different?

We've been busy improving the look of Consumer Reports and want to know what you think. There will be additional changes in the coming months—but no change in our mission to protect consumers and empower their lives. We'd love to hear your feedback.

Go to [CRresearch.org/october14](http://CRresearch.org/october14)

## COMING IN NOVEMBER

Best and worst of 2014, state of the shopper, health care costs, insurance rankings, detachable laptops, mattresses, LED bulbs, vacuums, and air purifiers.

## 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 of the products we rate. We don't accept paid advertising. We do not accept free test samples from manufacturers. We do not allow our name or content to be used without our permission. **How to reach us:** Write to us at Consumer Reports, 101 Trueman Ave., Yonkers, NY 10703-1057, Attn: Customer Service. To **send a letter** to the editor, go to [ConsumerReports.org/lettertoeditor](http://ConsumerReports.org/lettertoeditor).

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**Ratings** We rate products using these symbols:

● Excellent ● Very good ○ Good ● Fair ● Poor





## ON YOUR MIND

### Terms of endearment

In "The Gripe-O-Meter—Restaurants" (Up Front, August 2014), respondents whose gripe was a server referring to them as "honey" or "dear" indicates an unusual number of sourpusses. Those are common and endearing terms in much of the country. Years ago, a beloved server in the U.S. Senate cafeteria was officially reprimanded over calling customers honey or dear. It got into the local press, and hundreds of Senate staffers came to her defense. They appreciated her sentiments.

—Les Bergen Arlington, VA

### Healthy eating

With our country's obesity epidemic, you report on fast food? There are NO healthy choices at fast-food restaurants. The calorie counts, amounts of sodium and sugar, and fats are mind-boggling. Eat fruit and vegetables, America!

—Roberta Shelofsky via e-mail

### What about batteries?

In "Plug-in Reality Check" (August 2014), you talk about the positive impacts of electric cars on CO<sub>2</sub> production/pollution. But you don't mention the potential negative impacts to the environment associated with battery production. Those issues seem to be the "elephant in the room" that no one wishes to address.

—David J. Leonard Mundelein, IL

### Correction

A story on heart hospitals in the August 2014 issue said that we found five metropolitan areas—Detroit, Indianapolis, Los Angeles, Oklahoma City, and Portland, Ore.—where there are top- and low-scoring hospitals sometimes just a few miles apart. Detroit should not have been included in that list.



## ASK OUR EXPERTS

### Q. Avocados are supposedly good for you. Can I assume that avocado oil is likewise healthful?

—Joseph Ally Shingle Springs, CA

Avocado oil is a fine choice for a healthful vegetable oil (it's high in monounsaturated fats), but it's probably not readily available in most supermarkets. In fact, most liquid vegetable oils are healthy choices, but some—primarily olive and canola—are healthier than others.

**Q. In "Gadgets to Go" (August 2014), you advised setting up your own hot spot by using your phone as a personal Wi-Fi hot spot so that other gadgets can get online when no Wi-Fi is available. Will you please explain how we can do that?**

—Floyd Williams  
Mercer Island, WA

Many phones and tablets with 3G or 4G data capability have an optional function, found among the wireless settings, that enables their built-in Wi-Fi radio to work in reverse. When chosen, the feature lets the phone appear to other devices as a private Wi-Fi hot spot. It passes the data to the cellular network. Usually, you must pay a monthly fee for that in addition to the usual cellular data charges, and the device's battery may drain faster when the feature is in use.

**Q. I'm getting ready to purchase a new range and, as usual, am checking CONSUMER REPORTS. But I am in a quandary because the ranges with the highest ratings (specifically the LG brand) were on the higher end of the repair-prone brands. Should I lean toward the individual range rating or brand reliability?**

—Eleanora Koskiewicz  
Chicago

It depends in part on how important the features are to you. If you like cooking gourmet meals and are very meticulous with your recipes, then a range with the best features should take priority over reliability. If you are the average cook, reliability would be the most important factor to consider.

If you are choosing between brands that have repair rates with a difference of 4 points or fewer, you probably won't experience a difference in need for repair. In those cases, you should definitely buy based on performance. Your best bet is to choose a high-performing model that comes from a reliable brand.

**Q. It is recommended to run virus protection on your computer. What about smart phones and tablets? If so, is your recommended software for computers also good for those devices?**

—Bradley Chewning  
Harrisonburg, VA

We don't think that virus protection is as important on mobile devices, as long as you download apps only from the approved app marketplaces run by Apple, Google, and Microsoft. More important is your ability to prevent theft of your personal information stored on the device if it is lost or stolen. That is being addressed by apps such as Lookout and built-in functions such as Find My iPhone and Android's Device Manager, as well as the move by vendors to include a "kill switch" that can prevent the use of a stolen device.



## General Motors' recent safety lapse

**THE ISSUE** In 2014, GM has recalled about 29 million vehicles. That's more than it sold worldwide between 2011 and 2013. Some recalls involved ignition switches that were found to be defective years ago but weren't fixed, and have since been linked to at least 13 deaths.

**OUR TAKE** New rules are severely needed to prevent such a debacle from happening again. To start, Consumers Union is urging Congress to pass a set of pending bills that would increase

penalties for automakers that violate safety standards and allow greater oversight by federal safety regulators.

Separately, GM must make good on its promises to clean up its act. The company has established a fund to

compensate families whose loved ones were killed or seriously injured as a result of the faulty ignitions. We'll be watching closely to ensure that the families are treated fairly.

## Consumer Reports names new president

Marta Tellado, a top executive at the Ford Foundation, is the new president and chief executive officer of Consumer Reports. Tellado most recently was vice president of global communications and information management at the Ford Foundation, where she was instrumental in furthering the organization's mission to advance social justice and human achievement. Born in Cuba and raised in New Jersey, Tellado began her career at Public Citizen with consumer advocates Ralph Nader and Joan Claybrook. She also has held top positions at the Aspen Institute and the Partnership for Public Service. She takes over this month from Jim Guest, who is retiring after more than 35 years with the organization, the past 13 years as president.



## Come to our annual meeting

Please join us Saturday, Oct. 18, at our national headquarters, 101 Truman Ave., Yonkers, N.Y., and meet our new president and CEO, Marta Tellado. Doors open at 9:45 a.m. The meeting, which begins at 10 a.m., will showcase some of our experts and review the past year's accomplishments. You will have a choice of two lab viewings and a chance to mingle with our experts from 11:30 a.m. until 12:30 p.m. For details go to [ConsumerReports.org/annualmeeting](http://ConsumerReports.org/annualmeeting).

# 6,600

That's the number of premature deaths that can be avoided annually if the Environmental Protection Agency's Clean Power Plan is approved. The proposed guidelines would drastically reduce carbon and other pollution from the nation's existing power plants by 2030. The EPA's plan, which Consumers Union is supporting, would also prevent up to 150,000 asthma attacks in children each year, with a total health and climate benefit worth up to an estimated \$93 billion in 2030. Check [ConsumersUnion.org/energy](http://ConsumersUnion.org/energy) for updates.

### STATE LINES

## A crackdown on data breaches

Businesses in the Sunshine State have been put on notice. On July 1, the Florida Information Protection Act became official, giving the state one of the toughest data privacy laws in the nation. It requires businesses to protect all of their consumers' sensitive digital information and to shorten the time line for notifying regulators of a breach. Interestingly, Florida lawmakers defined "breach" as unauthorized access to personal information, regardless of whether an actual theft of data occurs. Consumers Union is pushing for a strong federal standard to protect all consumers.

## We work for you

With more than 50 labs, 140 highly trained researchers and technicians, a 327-acre auto test facility, and an army of advocates, Consumer Reports has no equal in the fight for a fair and just marketplace. We work for the consumer—not industry, advertisers, nor political group. To learn about our mission and the uniqueness and strength of our DNA, go to [youtube.com/ConsumerReports](http://youtube.com/ConsumerReports) and watch the "We work for you" video. Also subscribe to our YouTube channel to get updates when new videos are posted.





# Up Front



## Discounts for young and old

**Everyone loves a discount.** And people of a certain age can snag one ... by that we mean both young and old. Students often qualify for a break, and so do senior citizens. Ages vary widely, but be sure to ask, even if

the business doesn't have a policy listed. And get ready to show some identification. If you are not a student, you could get a break as a parent, because the money often comes out of your pocket anyway. Also ask

about any other breaks you might be able to get as a member of some other group. Though there are many offers, here are notable ones to get you started saving money on your purchases:

### FOR STUDENTS

**Apparel and sporting goods.** Ann Taylor and Banana Republic offer a 15 percent discount for full-priced purchases in stores when shown a college student ID. J.Crew and Madewell offer a 15 percent discount for in-store purchases when shown a college student ID. Teachers are also eligible. Eastern Mountain Sports has a 20 percent discount to college students for full-priced Eastern Mountain Sports brand items and a 15 percent discount for full-priced national brand items. Footlocker and Lady Footlocker have \$10 off a purchase of \$50 or more with a Student Advantage Discount Card. Students 16 and up are eligible for the card, which costs \$22.50.

**Food and entertainment.** High school and college students

are eligible to receive a discount card or a "Student Meal Deal" at participating Dairy Queen locations. Regal offers student discounts on select shows, times/dates, and locations. For requirements, contact your local theater. Select AMC theaters have "Student Day" every Thursday.

**Electronics.** Apple has education pricing online for college students or high school graduates anticipating the start of college. Parents buying for college students are also eligible. The Sony Education Store offers online discounts of up to 10 percent for college students. Students must first register with Sony. Lenovo's online Academic Purchase Program offers college students and those in grades K through 12 discounts on laptops, tablets, and desktop computers.

### FOR SENIORS

**Cell-phone service.** Consumer Cellular, which we've rated tops, offers AARP members voice plans starting at \$9.50 per month, and text and data plans for as little as \$2.38 per month.

**Clothing and department stores.** At Kohl's, a 15 percent discount is available every Wednesday for those at least 60. Belk offers a discount to those 55 and up on the first Tuesday of every month.

**Craft supplies.** Michaels stores grant AARP members 10 percent off every day.

**Eating out.** Expect a break at many lower-priced and midpriced chains. Some give discounts only during off-peak hours or days.

**Education.** Colleges and universities often offer seniors

low-cost and free classes. Go to [osherfoundation.org](http://osherfoundation.org) for the names of participating institutions.

**Glasses.** Pearle Vision offers AARP members 30 percent off a complete pair of glasses and up to 20 percent off contacts.

**Hotels.** A 10 percent discount is the norm for older guests. The discount might require an AARP affiliation. Without that affiliation, the discount kicks in based on age. At Best Western, it's 55; at Choice Hotels (Quality Inn, Comfort Inn, Clarion, and other brands), it's 60; and at LaQuinta, it's 65.

**Groceries.** Some chains shave off 5 percent, usually on one day of the week. On Tuesdays, for example, shoppers 55 and up get 5 percent off purchases of \$30 or more at A&P, SuperFresh, and Waldbaums.



## How to beat the high cost of filling up your tank

Gasoline prices have come down a bit since peaking in late April at more than \$3.60 per gallon, according to federal data. But filling up will still cost you a pretty penny. Just consider that if you have a 25-gallon tank, as does the Dodge Durango, and are paying \$3.40 per gallon, then you could be out more than \$80 at the pump. With that in mind, here are some tips to keep your fuel bill under control:

### Don't buy premium gas

If your car specifies regular fuel, using premium won't make your engine run better or improve mileage. All you will be doing is paying at least 20 cents more per gallon. Most cars are designed to run just fine on regular gasoline. Even many cars that suggest using premium will run well on regular, with imperceptible differences during normal driving. Check your owner's manual to find out whether the engine really requires premium or can run on other grades.

### Drive at moderate speed

You may have to be a little patient, but driving at 55 mph instead of 65 or 75 will save you money, as our tests have proved. When we drove our Honda Accord at a steady 65 mph, the car's fuel economy dropped from 49 mpg to 42 mpg compared with driving at 55 mph. Speeding up to 75 mph cost the car an additional 5 mpg. One reason is that aerodynamic drag increases exponentially the faster you drive; it simply takes more fuel to power the car through the air. Using an SUV in the same test,

our Toyota RAV4 dropped from 37 mpg to 33 mpg, then to 27 mpg at 75 mph.

### Unclutter your roofline

Do you still have ski racks on your car from last winter? It pays to take off such extra baggage to help improve your fuel mileage. Tests on the Honda Accord showed that adding an empty bike rack to the car dropped fuel efficiency by 5 mpg. By the way, adding two bikes lopped off an additional 10 mpg.

### Find the cheapest gas near you

Driving 50 miles out of your way to save a few cents doesn't make sense. But with a little research, you can find the cheapest spot to fill up around your home or work. Your local chapter of the Automobile Club of America may have a gas-price finder on its website. If not, the California AAA site serves other states and shows prices within a 3-, 5-, or 10-mile radius of an intersection. GasBuddy.com links to gas-price sites in the U.S. and Canada by state or province, county, or parish. But it tracks only regular gas and diesel fuel.

## Stay plugged in when the power goes out

If you lose power because of a storm or blackout, or even if you're on the road and far away from electrical outlets, you can still charge your cell phone or tablet. The following small power sources can be used to charge any USB-compatible device so that you can make calls, take pictures, or even play games to pass the time.

We tested four emergency chargers with an iPhone 5s and a Samsung Galaxy S4, using the internal batteries and the chargers' power-generation capabilities. We found that each tested device works, providing additional power for the phones. And each has pros and cons, compared with the other models.

### 1. Goal Zero Lighthouse 250 Lantern, \$80

The lantern was the most versatile device we tested. It uses a hand-cranked generator that can work under any conditions—as long as your cranking arm holds out! Its internal battery is the largest of the tested devices, and it includes a built-in USB charging cord. And unique among these four devices, the Lighthouse 250 also provides light: a dimmable white LED light and a flashing red light that could be useful for emergency signaling on the road.

An Apple iPhone 5s has a battery capacity of 1440 mAh, so the Lighthouse 250's fully charged 4400-mAh battery should be able to charge the 5s about three times. When the charger's battery is depleted, an iPhone 5s' battery-life indicator will increase about 1 percent for every 5 minutes



of hand-cranking that you do.

It's not the most portable of chargers, though; it certainly won't slip easily into a back pocket or a computer case. But if you're traveling by car or hiking, it provides a lot of value.

### 2. Eton BoostTurbine 4000, \$80

This turbine has a large internal battery (4000 mAh) and works with a hand crank, so it can be used to generate power under any condition. It also offers a battery-level indicator. But it's not as versatile as the Lighthouse 250 because it lacks LED lights. Also, its charging cable isn't integrated and could be misplaced. And we found it



## New tax rules limit your IRA rollovers

Starting next year, you'll have less flexibility to roll over an IRA from one account to another.

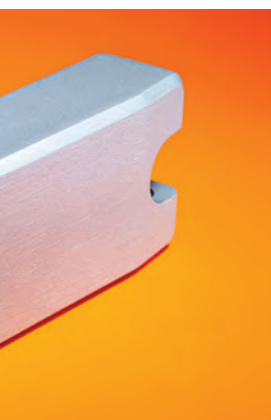
A U.S. Tax Court ruling earlier this year has put significant restrictions on how often you could do it. Beginning in January, the Internal Revenue Service has said that you can do only one rollover to another IRA within a 12-month period.

Before the January 2014 ruling, the IRS and most advisers viewed the rules pertaining to IRA rollovers as applying to each account. An individual with, for example, three IRAs could perform one rollover of each account every year. As long as the rollover was completed within 60 days, the funds weren't taxable.

The court has now concluded that if you've made any non-taxable IRA rollover in the preceding one-year period, any other rollovers may be subject to taxes.

That could end up frustrating those who may want to do some financial housekeeping by consolidating their multiple IRA accounts with one trustee (such as a brokerage or a bank), because the multiple rollovers could end up being taxable events.

Individuals who want to consolidate can still make unlimited IRA transfers from trustee to trustee.



harder to crank than the Lighthouse 250.

On the plus side, it can fold into a small-sized rectangle, so it would be easier to carry than the Lighthouse 250.

### 3. Goal Zero Nomad 7 Solar Panel, \$80

This foldable solar panel has no internal battery, so you can't charge it before you use it. But you can string several panels together for more power.

The Nomad 7 is handy when the sun is shining, but it becomes less useful at night or on cloudy days. So its efficacy is limited in emergency situations.

### 4. myFC PowerTrek, \$150

About the same size as the Eton BoostTurbine 4000, the myFC PowerTrek has an internal 1100-mAh battery. It works well but requires expendable fuel packs, so it's not as endlessly useful as the other devices we tested.

Each fuel cell costs around \$4 and is claimed to provide 5-plus watt-hours of power, enough to fully charge a standard smart phone, according to myFC. But you need to carry the fuel cells with you on trips—and they aren't cheap.

**Bottom line.** As emergency devices, all of the products provide a comforting level of backup power for your USB-compatible electronics in the event of a blackout. The Goal Zero Lighthouse 250 Lantern is the most versatile of the devices we tested and would make a good addition to your emergency provisions. Make sure that you practice with your selected charger before a real emergency occurs so that you can be confident of how it is used. And if it has an internal battery, make sure to keep that charged.

For more on storm preparation, see "Keeping the Current On," on page 43.



## 'Natural' is ingredient for confusion on labels

**What is natural**, and what does it mean on a food label? Right now it's essentially meaningless. But it ends up misleading a great many consumers, according to a recent national survey of more than 1,000 Americans by the Consumer Reports National Research Center.

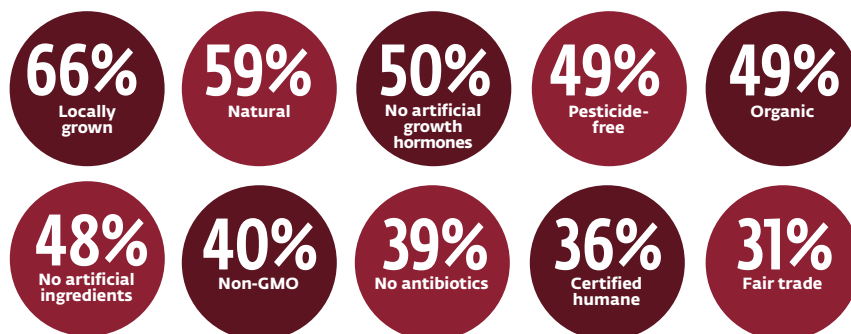
More than 75 percent attribute specific meaning to the word, such as contains no artificial ingredients, artificial

colors, or genetically modified organisms (GMOs). Or for meat and poultry, that the animals were never given antibiotics or artificial growth hormones. None of that is necessarily true. We are pushing to have the label banned. You can sign a petition at [takepart.com/food-labels](http://takepart.com/food-labels).

Consumers care a lot about how their food is produced, and they have some specific concerns. Most told us that

they want their food produced in an environmentally friendly way, based on the survey results, and they look to labels for cues as they make their decisions. When purchasing food, they want to support local farmers. Their other concerns include finding food that's locally produced. And most are even willing to pay more for food to ensure that it was produced in fair working conditions.

### Here's what consumers look for when it comes to food labeling:



## First Look: Amazon Fire phone is fun but flawed

**The Amazon Fire phone**, which we pre-viewed last month, has unique capabilities that make it easy, and even fun, to spend money with the retail giant. But even diehard Amazon shoppers could be turned off by the phone's limited access to Google apps and its short battery life.

One of the phone's distinguishing features is the Firefly app, which turns its microphones and rear camera into scanners, enabling the phone to recognize sounds and objects. The audio scanner generally worked well in our informal trials (Ratings will be available soon), identifying a movie or song within a few seconds. (But it had trouble

"hearing" songs in a noisy New York City restaurant.) Similarly, when we pointed the Fire's camera at a product container or bottle, little fireflylike dots swarmed around the object's logo or bar code until an ID was made. Though it was often successful, it occasionally failed to recognize well-known objects, such as a bottle of San Pellegrino water.

Amazon's Dynamic Perspective technology, which can make certain flat images appear three-dimensional on the phone's 4.7-inch display, worked well for the most part. When we tilted the phone, we could see items from different angles. But as of now there aren't many 3D items to view, so the feature doesn't

seem that helpful yet. Tilting the phone also enabled us to scroll up and down Web pages and summon app menu options, which is a plus. By jerking or tilting the phone, we could view messages and other notifications. Some gesture controls took a bit of effort to master.

For all of its pluses, the Fire phone has a few major drawbacks. App choices are confined to Amazon's Appstore, which is notably bereft of Google apps. That means no Gmail, Google Drive, Google Maps, Google Music, Google Now, Google Plus, and of course, Google's Play app store. You may be able to jump in via the phone's Silk Web browser or a third-party app, but you won't enjoy the synergy of Google

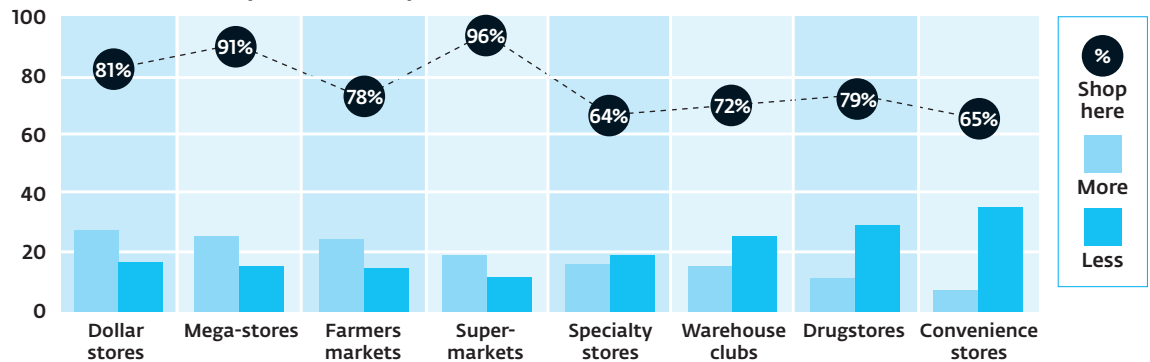


## Grocery savings habits of the American woman

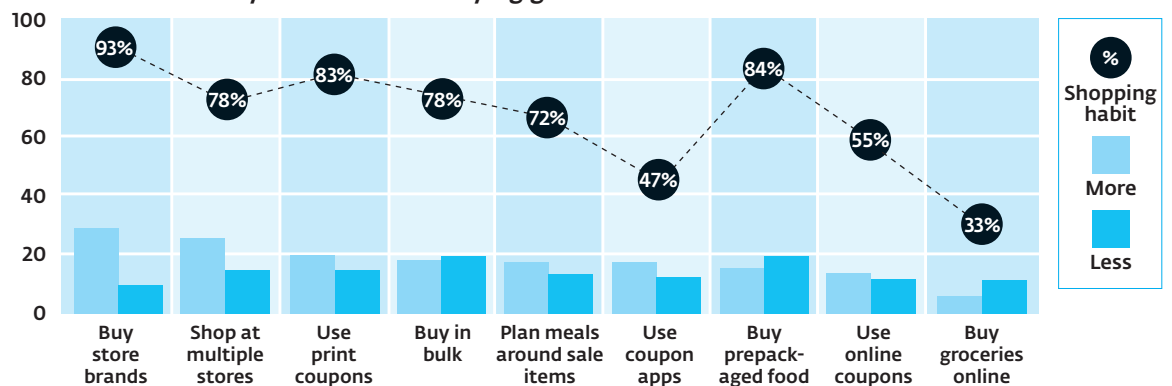
Supermarkets, move over.

Women are increasingly going elsewhere to do their shopping in hopes of saving more money. Though supermarkets still dominate the grocery shopping realm, other venues including mega-stores and local farmers markets are increasing their presence. Women are also paying attention to money-saving habits to spread their grocery dollar further. Here's a look at some of the details of how they're doing it. And you can compare yourself to see whether it matches with your habits.

Where women prefer to shop



How women try to save when buying groceries



Source: Consumer Reports National Research Center's March 2014 survey of 1,008 adult women in the U.S.

apps working together on the same device. Also, the operating system will be unfamiliar to most users, and battery life is shorter than on many other phones.

The Fire phone is available from AT&T (and on the Amazon website) for \$200 (32GB) and \$300 (64GB). At press time, it included 12 free months of Prime, Amazon's \$99-per-year, two-day-shipping-and-media-streaming service. Current Prime members will get 12 months added to their subscription. Fire phone owners get unlimited Amazon Cloud storage for photos taken with the Fire phone—which looked very good in our tests.



# 5 ways to fight the flu this year

**THE SYMPTOMS** come on fast and strong: muscle aches and pain, fever, headaches, and exhaustion. The flu can knock you out for weeks—and that's if you're a healthy young adult. For the young, the old, and those with weak immune systems, the risks of complications, such as pneumonia, are much higher. The best way to protect yourself is to get vaccinated—soon. This year's vaccine is the same as last year's, but you still need a fresh one this season. If you get it now, it should protect you through April, when the virus subsides. The vaccine prevents the illness up to 80 percent of the time in adults younger than 60 and about half of the time in those 65 and older. If you do get sick, you usually contract a milder case. Here are five ways to combat the flu:

**1 Consider the new 'quadrivalent' shot.** The standard shot, called the trivalent, protects against three of the most common

flu strains from last year: two influenza A (H1N1 and H3N2) viruses, and one influenza B virus. The quadrivalent version, which came out last year, protects against those plus another influenza B virus. The B strains are the ones most active at the end of the flu season in February and March. Manufacturers are making more of the quadrivalent vaccine this year, so you should be able to get it at your doctor's office or a local pharmacy. But unlike the standard vaccine, not all insurers cover it, so you might have to pay out of pocket, about \$38.

**2 Don't rush to get the high-dose vaccine.** This vaccine, called Fluzone High-Dose, has four times the standard shot's flu-antigen dose. And a manufacturer-supported study in the Aug. 14 issue of the *New England Journal of Medicine* found that it was slightly more likely than the standard vaccine to prevent the flu in people 65 and up. But the national Centers for Disease Control and Prevention says that the high-dose version might be more likely to cause side effects, including headache, muscle aches, and fever. So our medical experts say older people should weigh the possible risks and benefits of the vaccine when deciding which shot to choose.

**3 Get the nasal spray for kids.** This vaccine, called FluMist, will protect children ages 2 through 8 better than the regular shot, the CDC says in a new-for-this-season recommendation. The downside: A second dose may be necessary a month later. Because it uses a "tamed" but still live flu virus, it is not for anyone with a suppressed immune system, the people who care for them, pregnant women, or people 50 and older.

**4 Don't wait to take anti-viral drugs if you're at high risk.** The drugs oseltamivir (Tamiflu) and zanamivir (Relenza) can ease flu symptoms, reduce complications, and cut the chance of spreading the disease—if you start taking one within 48 hours of getting sick. But a CDC study out in July found that only about one in five high-risk patients got the drugs. "If you have symptoms and are in a high-risk group, ask your doctor for anti-viral drugs," says the CDC's Fiona Havers, M.D., one of the authors of the study. "Don't wait three or four days," she says. You're at high risk if you are 65 or older; are pregnant or delivered a baby within two weeks; have a chronic disease such as asthma, diabetes, or heart disease; have a suppressed immune system; are obese; or live in a nursing home or other chronic-care facility.

**5 Just say no to antibiotics for flu.** The drugs work only against bacteria—and the flu is caused by a virus. Yet the same CDC study found that doctors gave antibiotics to 30 percent of people with the flu. "And that's probably an underestimate," Havers says. "The study just looked at three antibiotics." Using those drugs when you don't need them can make them less effective when they are necessary and increases the risk of hard-to-treat bacterial infections such as *C. difficile*. Instead, go for the tried-and-true: plenty of sleep and fluids, and over-the-counter drugs. Acetaminophen (Tylenol and generic), ibuprofen (Advil and generic), and naproxen (Aleve and generic) reduce fever and headache and generally work better than products such as NyQuil and Theraflu, which contain medicines you probably don't need.

## Shopping for a shot

It seems like you can get a shot just about everywhere these days: Not only your doctor's office but also the corner drugstore, your church or synagogue, even the airport. So where should you go?

"Wherever it's most convenient," says William Schaffner, M.D., chairman of the preventive medicine department at the Vanderbilt University School of Medicine in Nashville, Tenn., and an expert in flu vaccines. Community centers, workplaces, and drugstores that offer shots must adhere to the same standards of cleanliness as

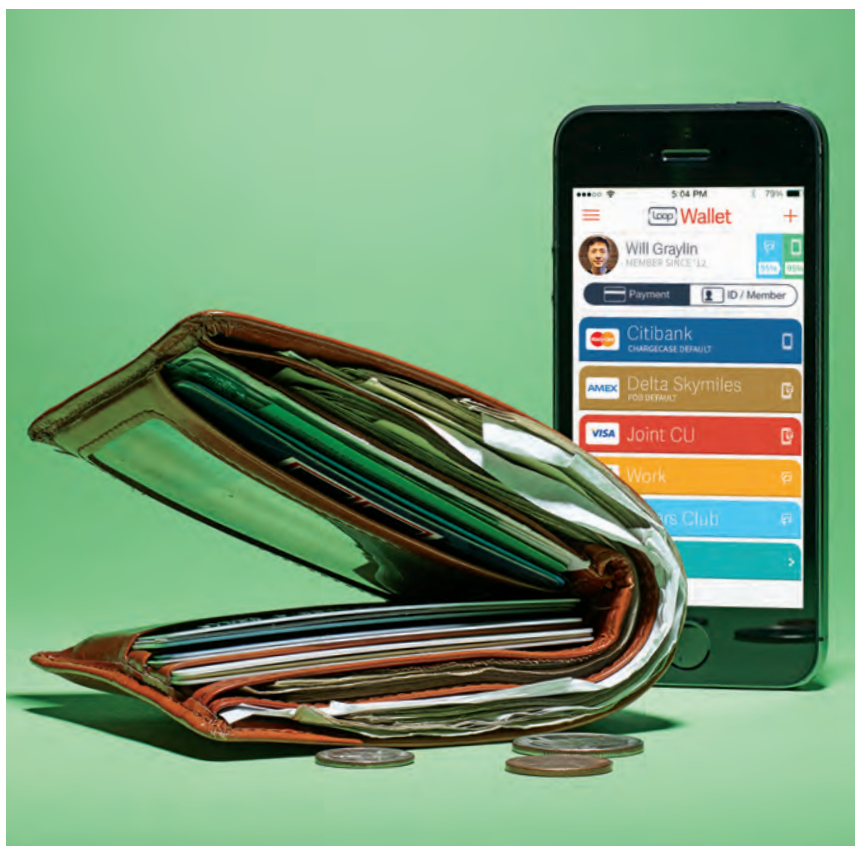
your doctor's office. And don't worry about getting bruised by a pharmacist. They're trained in immunization technique and practice giving shots regularly. To find a vaccination shot near you, go to [vaccines.gov](http://vaccines.gov) and type in your ZIP code.

The vaccine should cost you nothing—no co-pay and no deductible. That has been the case with

Medicare and Medicaid for decades, but now the Affordable Care Act requires that insurers fully cover preventive care. That's true whether you have insurance from your employer or an individual health plan you bought after 2010. But if you pick a location that doesn't accept your insurance, you might have to pay up front and be reimbursed.







## Wallet, meet smart phone

**EVER STAND AT A CASHIER** fumbling through your overstuffed wallet for the right credit, debit, or loyalty card? An end to the frustration may be on its way. For several years, a number of companies have been trying to get you to input the details of your payment cards into a “mobile wallet”—an app that is stored in your smart phone. Then you can make a payment from the card of your choice and even accrue applicable loyalty points simply by waving your smart phone over a card terminal.

Problem is, there haven’t been many merchants that can actually read the data stored inside mobile wallets. Google Wallet, which was introduced in 2011, and Isis Wallet, backed by AT&T, T-Mobile, and Verizon Wireless and launched nationwide in 2013, require merchants to have or buy equipment that includes a technology known as near field communication (NFC)—which has not yet been widely adopted. As a result, Google

Wallet and Isis Wallet work at only about 200,000 U.S. merchants compared with 12 to 15 million that take plastic.

But now a new player, LoopWallet, launched in February, uses magnetic pulse technology that allows its mobile wallet to work with 90 percent of existing card readers. That might be enough critical mass for the technology to become a viable option. However, a lot of pieces still have to come together for mobile wallet technology. Allied Market Research, based in Portland, Ore., projects that mobile payments will grow at a compounded annual growth rate of 127.5 percent, reaching a global market size of more than \$5 trillion by 2020.

Should you consider making the switch to LoopWallet or one of the others? Here’s what you should consider:

**The benefit.** More smart-phone owners are finding that their handsets are a convenient payment device, with 30 percent using

them to make online purchases, 24 percent to pay bills, and 17 percent to pay for store purchases, according to a recent Federal Reserve study. Mobile wallets provide one more payment option in today’s cell-savvy world.

**Convenience and fees.** For Google and Isis, you need at least some special hardware, including an NFC-capable phone (iPhone is not one of them, but with Isis you can buy a case for \$60 to \$70 that gives the iPhone NFC capability). For transmitting your card data, Loop requires a \$39 device called a fob. The company currently sells the fob with a phone charging case for \$99. Though Google and Loop work with almost any payment card, Isis works with only certain participating American Express, Chase Bank, and Wells Fargo cards.

**Security.** Digital wallets are not payment accounts. They’re merely electronic conduits for making payment using your existing payment cards. (The same consumer protections on those cards apply to payments even when using them through your phone.) All three mobile wallets use encrypted storage for data. They also require a personal identification number to unlock the wallet. But Google and Loop let you turn off the wallet-lock timer, which can leave it vulnerable to unauthorized charges. A nice feature: If your mobile wallet gets into the wrong hands, you can remotely disable the Google and Isis wallets, something Loop doesn’t offer. Overall, Isis is the most secure, using nine of 11 security measures we looked for—more than its rivals.

**Bottom line.** We signed up for all three mobile wallets and took them shopping with us in the San Francisco Bay area. Based on our comparisons, Loop was the most useful because it was the most widely accepted by merchants—we were successful at seven of the eight stores where we tried to pay with it. Google was the easiest to set up and the least expensive because it doesn’t require any accessories, and Isis won points for taking the most security measures.

If you see anything of yourself in the popular television character George Costanza from the sitcom “Seinfeld,” you may want to give one a try. In a classic episode, George’s wallet was so stuffed that it made his back ache. And eventually the wallet exploded. A mobile wallet could spare you that fate, if nothing else.



### RECALLS

#### HOUSEHOLD PRODUCTS

##### **Cordelia Lighting two-lamp fluorescent shop lights**

Lamp sockets can allow loose connections, posing risks of electrical arc and fire.

**PRODUCTS** 222,000 Commercial Electric brand hanging shop lights sold at Home Depot from August 2013 through March 2014 for about \$13. Cordelia Lighting has had 888 reports of incidents, including smoking, units catching on fire, sparking, and electrical arcing.

**WHAT TO DO** Do not use the light. Unplug it and return it to any Home Depot for a full refund. For info, call Cordelia Lighting at 800-345-0542.

##### **Linear PERS transmitters**

Batteries used in the transmitter can fail to emit a low-battery warning, leading to the belief that the transmitter is working when it's not.

**PRODUCTS** 175,000 Linear PERS (Personal Emergency Reporting System) transmitters sold nationwide from June 2008 through July 2011 for about \$45. This recall is an expansion of a previous recall of 48,000 units in December 2013.

**WHAT TO DO** Immediately contact Linear at 855-554-2384 or go to [linear-pers.com](http://linear-pers.com) to get a new free replacement transmitter.

##### **Bollinger Fitness resistance bands**

A black plastic ball attached to the band's door anchor can suddenly release and injure the user.

**PRODUCTS** 60,000 Bollinger Fitness Classic and SoftTouch



resistance bands sold nationwide and online from July 2012 through March 2014 for \$9 to \$14.

**WHAT TO DO** Stop using the door attachment. Call Bollinger Fitness at 800-255-6061 or go to [bollingerfitness.com](http://bollingerfitness.com) for details on how to get a free replacement door attachment.

#### AUTOMOBILES

##### **'97-'08 Chevrolet Impala, Monte Carlo, and Malibu; Oldsmobile Alero and Intrigue; and Pontiac Grand Am and Grand Prix**

This defect can affect the safe operation of the air-bag system. Weight on the key ring and/or road conditions or some other jarring event may cause the ignition switch to move out of the run position, turning off the engine. If the key is not in the run position, the air bags may not deploy if the car is involved in a crash.

**MODELS** 6,729,742 '00-'05 Chevrolet Impala and Monte Carlo, '97-'05 Chevrolet Malibu, '99-'04 Oldsmobile Alero, '98-'02 Oldsmobile Intrigue, '99-'05 Pontiac Grand Am, and '04-'08 Pontiac Grand Prix vehicles.

**WHAT TO DO** If you have a key fob, remove it from the key ring. Also remove any other item you have on the ring, leaving only the ignition key. GM will provide two free key rings and key covers on all ignition keys. Go to [gm.com](http://gm.com) for details.

## How safe are lithium-ion batteries?

Within the past decade or so, numerous laptop manufacturers have recalled defective batteries that were in danger of overheating. And a more recent news story told of a teenage girl whose Samsung Galaxy S4 smart phone slipped under her pillow and began to smolder as she slept. She woke to find, as her father told TV station KDFW in Dallas, "The whole phone melted. The plastic, the glass. You can't even really tell that it was a phone."

The Galaxy S4 uses a rechargeable lithium-ion battery, as do other smart phones, mobile devices, and other consumer products. When that story broke, Samsung pointed to a warning in its product guide, which states that covering one of its devices with bedding or other material could restrict airflow and cause a fire. But the company also says that the overheating phone's battery was a replacement, not the original Samsung battery. (At press time, Samsung was investigating the cause of the incident.)



So, are lithium-ion batteries inherently dangerous? And should you avoid using aftermarket third-party batteries when your device's original batteries wear out? We reached out to an expert to get some answers.

Jeffrey P. Chamberlain, Ph.D., the deputy director of development and demonstration for the Joint Center for Energy Storage Research at Argonne National Laboratory, says, "If heat is not

properly removed from either electronics or battery packs, the device can overheat and cause a cascading reaction that causes plastic to melt and, in some cases, catch on fire." But, he added, "there are literally billions of lithium-ion battery cells currently being used by consumers across the world. And I've only ever heard of a handful of such incidents."

**The bottom line.** It's better to be safe than sorry. Follow the manufacturer recommendations about how to use your device and about how (and whether) to safely replace its battery.

## Recalled products were still for sale

Once consumer products have been recalled, they are supposed to be pulled from the marketplace. But the Consumer Product Safety Commission says that 10 products that had been recalled in 2012 and 2013 were still being sold by a number of outlets. Those included Best Buy, Magnolia stores, and several liquidators. The recalling companies fully complied with the terms of their original recall, according to the CPSC. A spokesman for Best Buy says, "We regret that any products within the scope of a recall were not removed entirely from our shelves and other sales channels. While the number of items accidentally sold was small, even one is too many, and we are

taking steps to help prevent such issues from reoccurring." Consumers should stop using the recalled products immediately and contact the recalling companies. Information on which models are affected, when they were originally recalled, and how to contact the manufacturer is available at [cpsc.gov](http://cpsc.gov).

#### **The products affected are:**

Canon EOS Rebel T4i digital cameras; Coby televisions; Definitive Technology SuperCube 2000 subwoofers; GE dishwashers; Gree dehumidifiers; iSi North America Twist'n Sparkle beverage carbonation systems; LG Electronics electric ranges; LG Electronics gas dryers; Samsonite dual-wattage travel converters; Sauder Woodworking Company Gruga office chairs.





# Breakfast matters

Our tests of cereals and Greek yogurt help you find the right morning meal

**R**OLL YOUR EYES if you like, but the old bromide about breakfast being the most important meal of the day is true (mostly). Breakfast eaters tend to have better diets overall, consuming more fruit, vegetables, milk, and whole grains than non-breakfast eaters. And because the time between dinner and the next morning's meal is the longest your body goes without food, breakfast has an effect on you that's different from any other meal. Eating within 2 hours of waking can make a difference in the way you metabolize glucose, or blood sugar, all day. Your glucose level rises every time you eat, and your pancreas produces insulin to shuttle the glucose into your cells, where it's used for energy. Research is finding that keeping glucose and insulin in the right balance has important effects on metabolism and health. (See "This Is Your Body on Breakfast," on page 16.)

"After a healthy breakfast your blood sugar increases a little bit, but it will take a while for your body to absorb it," says Eric Rimm, Sc.D., a professor of epidemiology and nutrition at the Harvard School of Public Health in Boston. "So you might not be hungry for lunch for 5 hours."

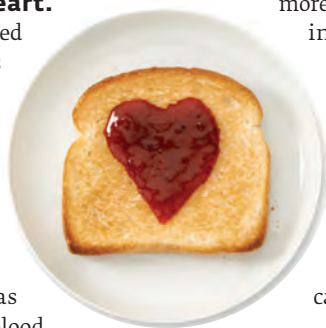
If you don't bother with breakfast, though, the prolonged fasting might lead to a bigger than normal boost in "hunger hormones" such as ghrelin, encouraging you to overeat at your next meal and leading to spikes and dips in glucose. "Over time, if your pancreas is constantly producing insulin to compensate for high levels of glucose, it will burn out and you'll develop diabetes," Rimm says.

What you eat is important, of course. If your idea of breakfast is a doughnut and a cup of coffee, or sugary cereal and a glass of fruit juice, you're setting the stage for metabolic havoc. Fortunately, breakfast can be flavorful as well as healthy. There are plenty of traditional breakfast foods that taste great and are good for you. Our food-testing team took a close look at 33 cereals and 27 Greek yogurts—two of the most popular breakfast items—to help you pick the most nutritious and best-tasting options. We sampled all of the products and crunched the nutrition numbers to determine which ones were winners and which ones were not so hot. No matter what your preference—something sweet and crunchy or smooth and creamy—there's a nutritious breakfast for you.

# 5 good reasons to eat in the morning

## 1 It may protect your heart.

In a recent study that involved almost 27,000 men, researchers found that those who didn't eat a morning meal were 27 percent more likely to develop heart disease than those who did. "Our research indicates that people who skip breakfast gain weight, which can lead to diabetes as well as high cholesterol and blood pressure—all of which can raise your risk of heart disease," Rimm notes. The reason isn't entirely known, but he says that breakfast skippers tend to overeat at other meals and snack excessively throughout the day.



more physically active during the morning than those who didn't. That might be because a temporary increase in blood sugar gave them more energy. It's interesting to note that those who ate a morning meal consumed more calories over the course of the day than the breakfast skippers—but they didn't gain weight because they were more active.

## 2 It might lower your risk of type 2 diabetes.

A morning meal may help you avoid fluctuating glucose levels, which can lead to diabetes. A study of almost 30,000 men found that not eating breakfast raised the risk by 21 percent, even after taking into account their body mass, what they ate, and other factors. In a study of women, those under age 65 who skipped breakfast even just a few times per week were 28 percent more likely to develop diabetes than women who ate it regularly. And if you're in the habit of dashing out the door for work in the morning with only a cup of coffee, take note: Women in the study who worked full-time had a greater risk than those who worked part-time, the researchers noted, possibly because job stress has been found to raise glucose levels.

## 3 It gets you moving.

In a recent study published in the American Journal of Clinical Nutrition (AJCN), people who ate breakfast were

## 4 It might give you a mental edge.

Research involving adults and children has indicated that breakfast might enhance memory, attention, the speed of processing information, reasoning, creativity, learning, and verbal abilities. Scientists at the University of Milan in Italy reviewed 15 studies and found some evidence that those benefits might be a function of the stable glucose levels that a morning meal provides.

## 5 It just might keep your weight down.

Although more than 100 studies have linked eating breakfast with a reduced risk of obesity, researchers point out that those studies are merely observational and thus don't prove that the meal keeps you from gaining weight. More solid evidence comes from randomized controlled trials. One study of that type, published in the journal Obesity, found that overweight people who were dieting and ate more calories for breakfast than dinner lost more weight compared with subjects who ate larger evening meals. But other trials have been inconclusive. A study published in AJCN found that eating or skipping breakfast had no effect on weight loss, although it may have been too small to be meaningful.

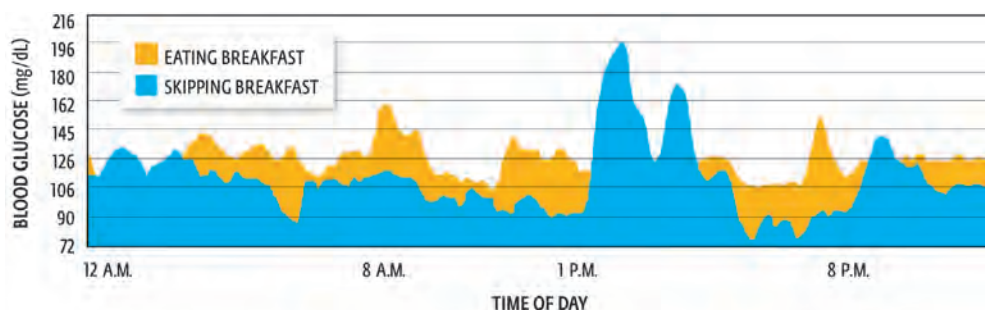
## Mix it up

There's no rule that breakfast has to consist of food specifically designated for that meal. In fact, last night's leftovers may be perfect. That's because most people consume about 50 to 60 percent of their total daily protein at dinner, and shifting those calories to the morning may have health benefits. In studies, eating protein at breakfast vs. lunch or dinner led to a greater feeling of fullness. Other research indicates that morning protein might encourage weight loss and increase muscle mass. Some good options: grilled chicken with vegetables, steak kebabs, or an egg-based casserole.

## This is your body on breakfast

Findings from a study called the Bath Breakfast Project at the University of Bath in the U.K. illustrate the effect that morning meals have on glucose balance. Researchers asked a group of subjects to eat 700 or more calories by 11 a.m. and another to fast until after noon. Both groups could eat whenever and whatever they wanted the rest of the day. Blood sugar was monitored every 5 minutes. Although the two groups ate similarly after noon, the breakfast skippers had bigger spikes and drops in glucose levels. The breakfast eaters improved their insulin

sensitivity—the body's response to rises in glucose—by 10 percent. "Eating breakfast seems to have a 'second-meal effect,' says James Betts, Ph.D., the lead researcher and a senior lecturer in nutrition and metabolism. "It primes your metabolism to maintain stable blood sugar levels after subsequent meals."



Source: American Journal of Clinical Nutrition



# Get the most from your breakfast

Follow these tips for a healthier start to your day

**Front-load your calories.** Aim to consume 20 to 25 percent of your total daily calories at breakfast (up to 400 calories for women, up to 500 for men, and a bit more for vigorous exercisers). Research shows that it increases levels of the satiety hormone PYY, helping you to feel full, and may reduce the number of calories you consume at lunch, according to Heather Leidy, Ph.D., an assistant professor in the department of nutrition and exercise physiology at the University of Missouri, Columbia. It may also help you avoid overeating later in the day, which may lead to weight gain.

**Think protein.** The latest research suggests that eating protein first thing in the morning is key. Having 24 to 35 grams may help prevent weight gain and promote weight loss by stabilizing your blood sugar, decreasing your appetite, and making you feel full. Morning protein also helps limit high-fat evening snacking. A study in *AJCN* found that people who ate a protein-rich breakfast consumed 200 fewer calories at night.

**Time it right.** "In general, researchers agree that you should have a meal within 2 hours of getting up," says Rania Mekary, Ph.D., an assistant professor at the Massachusetts College of Pharmacy and Health Sciences University in Boston. "If you eat later, you may be fasting too long."

**Pump up your cereal.** Ready-to-eat cereal on its own isn't the healthiest of

breakfasts. That's because it's primarily carbohydrates, with little fat or protein to help control blood sugar levels and keep you full. Milk adds protein, but not enough. Topping cereal with 1 cup (8 ounces) of Greek yogurt and a quarter-cup of almonds will supply 33 grams of protein. (Add fresh fruit for extra fiber and sweetness.) If only milk will do, supplement your cereal with an egg or a slice of whole-wheat toast with nut butter.

**Choose yogurt carefully.** All yogurts contain lactose, a naturally occurring sugar, but vanilla and fruit-based yogurts often contain added sugars. We tested 14 Greek vanilla yogurts and found that they had 6 to 21 grams of sugars. Those on the low end included Dannon Light & Fit Nonfat (7 grams), Yoplait 100 Fat Free (7 grams), and Activia Light Fat Free (6 grams). One way to keep the sugar down is to choose a plain variety, then add a tiny amount of vanilla extract and honey, or top with fruit.

**Don't be afraid of eggs.** True, eggs are high in dietary cholesterol, but their effect on your blood cholesterol level is minimal. Most people can eat several eggs per week without worry. They're an ideal breakfast food for people watching their weight. In a study in the *International Journal of Obesity* that was funded by the American Egg Board, people on a low-fat diet who ate eggs lost more weight than those who ate a bagel. And eggs have been found to reduce levels of the hunger-stimulating hormone ghrelin and to increase levels of PYY3-36, a hormone associated with satiety.

**Go easy on the fruit juice.**

A small glass each day—4 ounces or a half-cup—is fine, but don't overpour. Choose whole fruit instead, which has less sugar and more fiber, and is more filling.

## THE LOWDOWN ON EGG SANDWICHES

Breakfast sandwiches are among the most popular a.m. foods. But our recent tests of frozen egg-and-meat varieties suggest that even the healthy-sounding ones don't have much going for them in the nutrition or taste departments. They supply a hefty amount of protein, but like many other processed foods, they tend to be packed with sodium, low in fiber, and high in fat. The ones we looked at were healthier than comparable options at drive-thrus. McDonald's Sausage McMuffin, for instance, has 370 calories, 23 grams of fat, and 780 milligrams of sodium. Burger King's Sausage, Egg & Cheese Muffin Sandwich has 430 calories, 26 grams of fat, and 1,140 milligrams of sodium. Here are a few you might try in a pinch:



**Kellogg's Special K Flatbread Breakfast Sandwich, Sausage, Egg & Cheese**

240 calories, 11 grams

of fat, 820 milligrams of sodium

Nutrition: ○ Taste: ●



**Jimmy Dean Delights English Muffin Turkey Sausage, Egg White & Cheese**

250 calories, 8 grams of fat, 650 milligrams of sodium

Nutrition: ○ Taste: ○



**Lean Cuisine Turkey Sausage English Muffin**

220 calories, 5 grams of fat, 680 milligrams of sodium

Nutrition: ○ Taste: ○



**Weight Watchers Smart Ones English Muffin**

**Sandwich Turkey Sausage**  
230 calories, 8 grams of fat, 490 milligrams of sodium

Nutrition: ○ Taste: ○

● Excellent ● Very good ○ Good ● Fair ● Poor

## WHAT TO LOOK FOR IN A YOGURT

- 20 grams or less of sugar per serving
- those that supply at least 15 percent of the daily value of calcium (yogurt is an excellent source)
- if fat intake is a concern, low- or nonfat products when possible



## WHAT TO LOOK FOR IN A CEREAL

- few ingredients
- 5 grams or more of fiber
- no more than 3 grams of fat
- no more than 8 grams of sugar
- no more than 140 milligrams of sodium





**All tested products** In order of quality.

 Excellent  
 Very good  
 Good  
 Fair  
 Poor

 CR Best Buy  
 Recommended


### Top 5 cereals



**Bob's Red Mill Old Country Style Muesli** A tasty blend of raw oats, nuts, seeds, dates, and raisins that's clean, balanced, full, and complex.



## Kind Vanilla Blueberry Clusters with Flax Seeds

 This sweet granola has grains, brown sugar, and vanilla with nutty undertones and a distinct blueberry flavor. It's balanced and well-blended.



**Cheerios Toasted Whole Grain Oat** The simple toasted-oat flavors can be enhanced by milk.



## Cheerios Multigrain

These crispy, tricolored O's are moderately sweet with toasted multigrain notes that hold up well in milk. This version is a little less toasted than the original, and sweeter.



### Post Grape Nuts (Original)

**Grape-nuts** This notably hard and crunchy cereal has toasted wheat and barley flavors with very little sweetness. It soaks up a lot of milk, which softens and improves the texture.

# 91%

That's the percentage  
of U.S. households  
that consume cereal.

89%

**eat it for  
breakfast**

# 33%

eat it as  
a snack

52%

**think it's  
healthier than  
other options**

54%

**trust the health  
benefits  
promised**

Source: Mintel report on breakfast cereals, August 2013.

## BREAKFAST CEREALS

[illegible]

\*Contains non-nutritive sweeteners.

## Guide to the Ratings

We came up with a list of 55 cereals whose names suggested they were nutritious. We evaluated them for calories, fat, fiber, sugars, iron, and other nutrients listed on the labels, and identified 33 that were actually healthy (they rated at least Very Good for nutrition). The cereals that made the cut were included in our taste tests. Overall scores are a combination of nutrition and taste scores. Just two cereals received an Excellent nutrition rating: Fiber One Original and Fiber One Honey Squares.

# Ratings Greek yogurt

All tested products In order of quality, within types.

● Excellent  
● Very good  
○ Good  
● Fair  
● Poor  
■ CR Best Buy  
■ Recommended

| Rec. | Rank | Product | Price | Package size (oz.) | Serving size (oz.) | Price per serving (\$) | Overall score | Test results | Per serving |
|------|------|---------|-------|--------------------|--------------------|------------------------|---------------|--------------|-------------|
|      |      |         |       |                    |                    |                        |               |              |             |
|      |      |         |       |                    |                    |                        |               |              |             |

## A PLAIN GREEK

|   |    |  |        |      |   |      |    |   |     |     |    |    |    |
|---|----|--|--------|------|---|------|----|---|-----|-----|----|----|----|
| ✓ | 1  | Fage Total 2% Fat  | \$6.55 | 35.3 | 8 | 1.64 | 85 | ● | 170 | 4.5 | 9  | 25 | 23 |
| ✓ | 2  | Fage Total   | 6.95   | 35.3 | 8 | 1.74 | 84 | ○ | 220 | 11  | 9  | 25 | 20 |
| ✓ | 3  | Kirkland Signature Nonfat (Costco) <sup>[2]</sup>        | 6.90   | 64   | 8 | 0.86 | 80 | ● | 140 | 0   | 7  | 25 | 24 |
| ✓ | 4  | Great Value Nonfat (Walmart)                             | 4.00   | 32   | 8 | 1.00 | 76 | ● | 120 | 0   | 9  | 30 | 23 |
| ✓ | 5  | Stonyfield Organic Nonfat                                | 7.45   | 32   | 8 | 1.86 | 76 | ● | 130 | 0   | 9  | 30 | 23 |
| ✓ | 6  | Simply Balanced 0% Fat (Target)                          | 4.70   | 32   | 8 | 1.18 | 76 | ● | 120 | 0   | 10 | 30 | 20 |
| ✓ | 7  | Fage Total 0% Fat  | 6.20   | 35.3 | 8 | 1.55 | 76 | ● | 130 | 0   | 9  | 25 | 23 |
| ✓ | 8  | Siggi's (Strained) Nonfat                                | 5.50   | 24   | 8 | 1.83 | 72 | ● | 120 | 0   | 6  | 30 | 23 |
| ✓ | 9  | Oikos 0% Fat   | 4.95   | 32   | 8 | 1.24 | 72 | ● | 120 | 0   | 9  | 25 | 22 |
| ✓ | 10 | Trader Joe's 0% Fat                                      | 5.00   | 32   | 8 | 1.25 | 71 | ● | 120 | 0   | 6  | 20 | 22 |
| ✓ | 11 | Wallaby Organic 0% Fat                                   | 7.30   | 32   | 8 | 1.83 | 61 | ● | 130 | 0   | 5  | 25 | 23 |
|   | 12 | 365 Everyday Value Fat-Free (Whole Foods) <sup>[1]</sup> | 3.00   | 32   | 8 | 0.75 | 60 | ● | 160 | 0   | 11 | 80 | 23 |
|   | 13 | Chobani 0% Fat   | 5.70   | 32   | 8 | 1.43 | 59 | ● | 130 | 0   | 6  | 25 | 22 |

## B VANILLA GREEK

|   |    |   |      |      |     |      |    |   |     |   |    |    |    |
|---|----|---|------|------|-----|------|----|---|-----|---|----|----|----|
| ✓ | 1  | Wallaby Organic Whole Milk                              | 2.00 | 5.3  | 5.3 | 2.00 | 85 | ○ | 170 | 5 | 18 | 15 | 10 |
| ✓ | 2  | Fage Fruyo Nonfat                                       | 1.25 | 6    | 6   | 1.25 | 81 | ● | 140 | 0 | 18 | 15 | 15 |
| ✓ | 3  | Stonyfield Organic Nonfat                               | 1.45 | 5.3  | 5.3 | 1.45 | 74 | ● | 110 | 0 | 12 | 15 | 14 |
| ✓ | 4  | Siggi's (Strained) Nonfat                               | 2.20 | 5.3  | 5.3 | 2.20 | 70 | ● | 100 | 0 | 9  | 15 | 14 |
| ✓ | 5  | Chobani 0% Fat  | 1.20 | 5.3  | 5.3 | 1.20 | 68 | ● | 120 | 0 | 13 | 15 | 13 |
| ✓ | 6  | Oikos 0% Fat <sup>[2]</sup>                             | 3.80 | 21.2 | 5.3 | 0.95 | 66 | ● | 120 | 0 | 18 | 15 | 12 |
| ✓ | 7  | Activia Nonfat  | 1.05 | 5.3  | 5.3 | 1.05 | 64 | ○ | 140 | 0 | 21 | 15 | 12 |
| ✓ | 8  | Chobani Simply 100 Nonfat <sup>[3]</sup> <sup>[4]</sup> | 1.05 | 5.3  | 5.3 | 1.05 | 61 | ● | 100 | 0 | 7  | 15 | 12 |
|   | 9  | Trader Joe's 0% Fat                                     | 3.00 | 16   | 6   | 1.13 | 55 | ○ | 140 | 0 | 19 | 20 | 14 |
|   | 10 | Great Value Nonfat (Walmart)                            | 4.00 | 32   | 6   | 0.75 | 55 | ○ | 140 | 0 | 20 | 25 | 14 |
|   | 11 | Activia Light Fat Free <sup>[3]</sup>                   | 1.25 | 5.3  | 5.3 | 1.25 | 53 | ● | 80  | 0 | 6  | 15 | 13 |
|   | 12 | Dannon Light & Fit Nonfat <sup>[3]</sup>                | 1.05 | 5.3  | 5.3 | 1.05 | 53 | ● | 80  | 0 | 7  | 15 | 12 |
|   | 13 | Yoplait 100 Fat Free <sup>[3]</sup>                     | 1.05 | 5.3  | 5.3 | 1.05 | 52 | ● | 100 | 0 | 7  | 15 | 13 |
|   | 14 | Yoplait Blended Fat Free                                | 1.05 | 5.3  | 5.3 | 1.05 | 51 | ● | 140 | 0 | 18 | 10 | 11 |

<sup>[1]</sup> Our testing of six samples found an average of 11 grams of sugars per serving, not the claimed 2 grams. <sup>[2]</sup> Tested as multipacks.

<sup>[3]</sup> Contains non-nutritive sweeteners. <sup>[4]</sup> Contains added fiber.

## Guide to the Ratings

We evaluated 27 plain and vanilla Greek yogurts for nutrition and taste. Overall scores are a combination of those factors. Most of the yogurts that were low-fat or fat-free and lower in total sugars scored Excellent for nutrition. Greek yogurts usually have about twice the protein of regular ones, and they tend to be slightly lower in calcium and higher in calories. In general, the better-tasting yogurts contained more fat, though there are many tasty nonfat choices. Those on the low end had "off" flavors and textures, such as chalkiness. When we added honey and walnuts to plain Greek yogurt brands, taste differences were minimized. So if you plan to add your own toppings to plain yogurt, choose by price.

## Top yogurts



### PLAIN GREEK

**Fage Total 2% Fat**  
Thick, creamy, and less tangy than other products.



### PLAIN GREEK

**Fage Total** Thick and creamy, with sour-cream notes. Less tangy than most.



### VANILLA GREEK

**Wallaby Organic Whole Milk Creamy** yogurt that tastes rich, like a dessert.



### VANILLA GREEK

**Fage Fruyo Nonfat Yogurt** and vanilla flavor

make it a standout, despite being a touch chalky.

## HOW MUCH SUGAR IS IN THAT YOGURT?



Plain Greek yogurts are lower in sugar than their regular counterparts. That's because they're strained to remove the whey—the liquid that remains after milk has been curdled—which contains a good amount of lactose (sugar from milk). But the sugar content of Whole Foods' 365 Everyday Value Plain Fat-Free Greek yogurt seemed too good to be true. The label says it has just 2 grams of sugars per 8-ounce cup; comparable brands have 5 to 10 grams of sugars per cup. Plus the label says the yogurt has 16 grams of carbohydrates, which usually come from lactose. So we analyzed six samples of the yogurt from six different lots and found an average of 11.4 grams per serving, more than five times what's listed on the label. (Whole Foods Market is investigating the matter.) But we gave this protein- and calcium-rich product a score of Excellent for nutrition and Good for taste. Our testers found that it had a chalky texture.



**Camera** Google Glass takes 5-megapixel stills, shoots 720p video

**Display** Google claims its tiny monitor is equivalent to a 25-inch HD screen seen from 8 feet away

**Connectivity** Bluetooth, Wi-Fi

**Storage** 12GB usable memory, synced with Google Cloud service

Hotly awaited Google Glass is just one of the new devices that turns your body into an electronic-sensor array. Welcome to the world of wearable tech.

# That computer looks good on you

**THE SMART PHONE** has integrated itself into our lives so thoroughly that many of us would feel naked leaving the house without it. A recent IDC survey of smart-phone owners found that 79 percent keep their device with them for all but two of their waking hours. And Google has claimed that Android users check their phones an average of 125 times per day. This near-obsessive need to stay connected is one of the drivers behind a new category of electronics, known collectively (and somewhat vaguely) as wearables. Many of these devices tether you more tightly to your smart phone—so you can take calls or monitor text messages from your wrist, or feed your phone your recent

workout data, such as how many steps you've taken or your heart rate. Someday a combination of such gadgets could supplant the smart phone altogether.

It's hard to predict exactly what devices will eventually come to define wearable tech, but the category has evolved from its experimental phase to a bona fide consumer product category in a hurry. The smart watch company Pebble, for instance, first listed its prototype on the crowdfunding site Kickstarter in 2012—and by 2013 the company's product was on the shelves at Best Buy. This past spring, online retailer Amazon created a dedicated store for wearable tech. Google has launched a version of its mobile

operating system called Android Wear to speed development of these products, and Apple is widely expected to launch its own health-and-fitness-oriented smart watch.

## Glass warfare

There's one device that seems to embody all of the potential of wearable electronics for both convenience and cyborglike strangeness. Google Glass is a wirelessly connected, voice-controlled, head-mounted computer that displays search results, navigation directions, and even recipes in the user's peripheral vision. Google is a company that is fond of experimentation, pushing projects such as self-driving cars and high-altitude



# We tried Google Glass

**CONSUMER REPORTS** spent months using Google Glass on a near-daily basis. Here's what the device lets you do and how it stacks up as a consumer-electronics product in real-world and lab testing.

**Take photos and videos.** It's no exaggeration to say it's as easy as winking an eye to take a photo with Glass because you can set the device up to do just that. Once you get your shot, you can share it to Facebook or your Google Plus circles. Photos are also backed up automatically to your Google Plus album when you are on Wi-Fi. You can dictate captions—Google Glass' voice recognition worked quite well for us. Taking a video is equally simple. Glass records just 10 seconds by default, but you can extend that by tapping the touchpad near your temple—the device has 12 gigabytes of onboard storage.

**Make a phone call.** Using Glass to make a call isn't that different from using a Bluetooth headset. The device comes with an optional earpiece that connects with micro USB; remove it and you can listen with the device's built-in bone-conduction transducer, or BCT. The technology, which is used in a number of headphones already on the market, transmits vibrations to your inner ear through your skull. We found that BCT worked

adequately for phone calls in a quiet setting but was hard to hear in noisy environments.

**Listen to music.** If you have a Google Play Music account, you can tap into it to listen to music through Glass. As with any streaming service accessed through a phone, if you're not on a Wi-Fi network you'll be burning through your cellular data plan. (You can't directly access music stored on your phone.) If you do plan to listen to music through Glass, consider paying extra for the company's stereo earbuds. Neither the bone-conduction technology nor the single earbud that comes with the device provides a good listening experience.

**Use mobile apps.** At press time, there were more than 100 apps for Glass, including versions of Facebook, Foursquare, OpenTable, and other mainstays of the mobile life. You can have weather alerts pop up on Glass, check stock listings, and play blackjack or other games. You can also browse ordinary websites with the device, but we found navigation to be clumsy, and it was uncomfortable to read more than snippets of information using the device.

**Improve your golf game.** The most intriguing apps may be those that go to work when you're doing something active. Getting driving directions is the

**Google Glass**  
You can now get Glass with custom frames and prescription lenses.



most obvious example. A more novel one is GolfSight, which combines GPS data with a database of golf courses to flash the distance remaining to the green. An app called Star Chart identifies

stars, planets, and constellations as you gaze at the night sky. Word Lens will automatically translate printed words on road signs or menus by using the Glass camera and Google Translate.

## Testing results

We took a first look at Glass' photos and videos in our labs in much the same way that we test phones, pocket cams, and other devices. We also tested sound and the device's battery life. Note: The version of Glass we tested was the one available in the spring.

| Item          | Description   |
|---------------|---|
| Image quality | Pictures shot in bright light were slightly oversaturated, images were noisy, and contrasts lacked depth and dimension. In low-light conditions, images were underexposed.  |
| Video quality | Glass' videos images were comparable to its still photos in quality. Note: It records at a slow 30 fps, making jitter noticeable in panning shots.  |
| Sound quality | We found Glass' monophonic bone-conduction technology thin and telephonic. It was adequate in quiet conditions but hard to hear in noisy situations, such as listening to turn-by-turn directions on the highway.   |
| Battery life  | Google claims one day of battery life for "typical" use. We noted about 3 hours of battery life under what we considered continual "moderate" and "heavy" use. The protocols included tasks such as following turn-by-turn directions, recording video, and listening to music. |

Internet balloons out into the world long before they are ready for widespread use. Glass launched in 2012 with about 2,000 "Explorers" who pledged to use the device in a wide range of settings. Those included an airline pilot who used Glass to shoot video of his travels for his family to view through Google Plus and a mom who created a video blog of her child learning to walk. Then, this spring, the company started offering Glass to anyone willing to shell out \$1,500. That's when CONSUMER REPORTS bought a pair, and we've been using and evaluating it ever since.

If Google's soft launch of Glass was intended to warm the general public to a

new product category, the plan may have backfired. It turns out that many people found a head-mounted computer with a front-facing camera goofy-looking—and more than a bit creepy. Soon, late-night comics were making jokes about it, and some restaurants and movie theaters were banning "Glassholes" from their premises. (See "The Trouble with Glass," on page 24.) Google's experiment had become a phenomenon that surfaced all kinds of questions about privacy and the etiquette of wearable technology before most consumers could even get their hands on the device.

Given all the bluster around Google Glass, we wanted to examine some practical

questions. How does it perform as a consumer electronics device? Is it comfortable to wear this thing on your head all day? Does a camera worn on your face actually take decent photographs and video? And was wearing Glass in public going to get our testers punched in the face?

## How it works

Glass syncs via Bluetooth to a smart phone; it then uses that connection or Wi-Fi to connect to the Internet. A small boom that extends from the frame contains a 5-megapixel camera and a viewfinder that sits just above the right eye. Once you set up the device using the MyGlass app and website, you can

use Glass with voice commands to make calls, get verbal and visual directions, check your social networks, take photos and videos, listen to music, and run a variety of apps—all while leaving your phone tucked away in your pocket.

Wearing a computer on your face takes a bit of getting used to. Glass feels heavy after a while, and if (like our primary field tester) you already wear eyeglasses, you'll either have to put up with the device on top of them or buy Glass with prescription lenses. You'll also need to get used to a whole new user interface. Typing? Never happens. Instead, you tap the touchpad on the frame or tilt your head backward to wake Glass up. You'll see a screen displaying the time and the words "OK, Glass." Say OK Glass out loud or tap on the touchpad. You can then choose from a list of voice commands that scroll down the screen (new ones are added as you install apps) or tap and swipe your way through the menus.

Our testers found that it took some time to learn the gestures, but eventually they became second nature. It was more difficult getting used to the display, which appears to float in the air above your right eye. You can swivel the screen to improve the viewing experience, but at any angle our testers noticed a faint double image when text was being displayed and found it difficult to read in bright sunlight.

Glass isn't Google's only foray into wearable technology, or its biggest. At the company's big developers conference in June, Glass took a backseat to the introduction of the Android Wear OS, which will be used first in smart watches—from LG, Samsung, and others—and eventually in additional wearable gadgets. At the same time, companies including Samsung have filed patents for Glass-like technologies. Five years from now, will we all be wearing head-mounted displays? Maybe. But the devices could find their real home in specialized settings. For example, some surgeons have started using Google Glass to view diagnostic images of a patient in the operating room.

What's clear is that wearable tech is still in its early days. As computing power migrates into our clothing, jewelry, and, yes, our eyeglasses, engineers are certain to come up with lighter-weight, more convenient mobile technologies for delivering text messages, serving up timely data, and possibly targeting us with location-specific ads. You won't have to pull out your phone to see the incoming information—and it won't be as easy to ignore it. Whether that all sounds intrusive or liberating depends on your perspective.

## Wide world of wearables

Even if you've never heard of wearable technology, you may know someone who uses the most popular type of gadget in the category, an activity tracker that records fitness data and transmits it to a smart-phone app and website. Susan, a 58-year-old Connecticut resident who works in the insurance industry, was given a Fitbit tracker by her company in June 2013 as part of a wellness program. (She asked us not to use her last name.) The product is known for prompting users to reach a daily total of 10,000 steps; Susan often hits 25,000 steps thanks largely to the 2-hour runs she takes a few times a week. "I was fit before, but now I've raised the bar. It's a motivator." She recently bought one for her mother, who is 82 years old.

Like other wearable technology products, the Fitbit makes use of the tiny, inexpensive sensors and processors developed for the smart-phone industry in recent years. Such technical innovations are allowing engineers to build computing power into wristwatches, necklaces, headbands, and even socks. New products are emerging rapidly. Here are the main areas of innovation.

### SMART WATCHES

Depending on which of today's half-dozen or so models you own, a smart watch can alert you to a phone call, e-mail, social-media updates, and more. One app for the Pebble lets you trigger your phone's camera to take a picture remotely, and several watches enable you to control your phone's music apps. The **LG G Watch**, one of the first to use



**FitBark, \$69 (on preorder)**  
Yes, there are activity trackers for dogs. FitBark raised \$80,806 on Kickstarter.

the Android Wear operating system, performs a number of neat tricks. For instance, when you're navigating using Google Maps, the watch will vibrate to remind you when it's time to turn. Android Wear integrates with Google Now, and the smart watches accept the voice commands already familiar to users of Android phones.

### ACTIVITY TRACKERS

Activity trackers including the Fitbit and **Misfit Shine** perform tasks such as measuring how many steps you take throughout the day, monitoring your heart rate, calculating the calories you burn, and collecting data about your sleep patterns. You can access the data from a phone or computer and in some cases share it with a group of peers. One startup is developing a thin adhesive strip called the **ElectroZyme** biosensor that is meant to be worn on the skin, analyzing perspiration to provide athletes with detailed feedback on hydration levels and other performance parameters; it could also have pure medical applications. Apple recently announced **HealthKit**, an app bundled with iOS 8 designed to help you keep track of all of your health and fitness data, and Google introduced **Google Fit**, a similar platform to collate information from activity trackers and health sensors.

### LIFELOGGERS

It's a truism that digital technology allows us to offload our memories—there's no need to learn phone numbers or recall the route to your brother's house once you begin carrying a smart phone. A small number of "lifelogging" wearable cameras take that to a new extreme. Niche devices such as the **Narrative Clip** snap pictures all day long, which can help you recall a wine label—or else just make your dinner companion squirm. The new **Sony SmartBand** is also being touted as a lifelogging device: It monitors your physical activity like a Fitbit but also keeps track of how much time you spend Web surfing and playing games on your phone.

### MEDICAL SENSORS

Contemporary heart-rate monitors fall into this category. In a sense, so does the **Reebok Checklight**, which can be worn under a helmet and alert football or hockey coaches with a series of lights when a player's head has undergone an impact that might be associated with a concussion. Google is working on a contact lens that is promised to monitor blood-glucose levels in diabetics. Devices may someday be available to monitor the tremors of Parkinson's patients, detect seizures, and transmit vital signs to a medical team.



**1. Reebok Checklight, \$150**

For athletes involved in impact sports, this cap's sensors measure impacts to the head and indicate their potential severity.

**5. Nod Gesture Control Ring, \$150 (on preorder)**

Make a phone call, change TV channels, and more by waving your hand.

**2. Misfit Bloom Necklace, \$80 (plus \$100 for Shine monitor)**

Track workouts, tally calories, and monitor your sleep—stylishly.

**4. LG G, \$230**

Manage your e-mail and social media—from your wrist.

**3. Narrative Clip, \$230**

They call it lifeblogging; this clip shoots photos all day, every 30 seconds.

**6. Sensoria Fitness Socks, \$200**

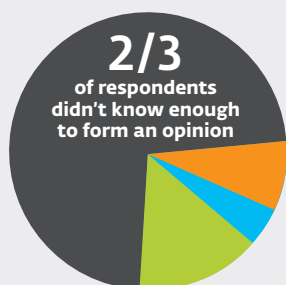
Track steps, speed, altitude, and even your running technique.





## Love it or hate it?

Google Glass has been a divisive product. It has been ridiculed by TV comedians, and some people worry that Glass users can shoot video without anyone knowing about it. In June we surveyed Americans to see how they felt about the Glass, and discovered that most people were still waiting to learn more. Still others were excited by the technology.



Consumers who had an opinion said:

Google Glass invades people's privacy—I hope it doesn't catch on.

32%

Google Glass seems awkward—it will never be popular

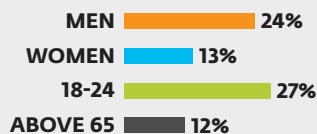
16%

Google Glass is an exciting technology—I'm optimistic about it

52%

### Gender and age matter

Men are almost twice as likely as women to feel optimistic about Glass. And the youngest respondents, 18- to 34-year-olds, are more than two times as likely to feel excited about it than those older than 65.



Consumers who felt "optimistic" about Glass.

## The trouble with Glass

**When you start using a convenient, new digital product, whether it's Facebook or a shopping app, you often have to compromise your privacy. It's a trade-off. But critics of Google Glass say that with this technology, it's other members of the public whose privacy suffers because they may not know when they're being photographed. That is one of several concerns the technology has prompted.**

### Covert surveillance.

A Glass user can snap a photo or shoot a video clip with just a subtle tap on the frame. (Lifelogging devices go much further: The Narrative Clip camera takes two photographs per minute, without any input from the user.) That may make people uncomfortable, and the use of the video capability apparently contributed to one confrontation in which a Glass owner had the device snatched from her face. **Yes, but:** We had an editor attempt to push the boundaries to see how commonplace those concerns really are. She passed through airport security and entered public restrooms and coffee shops while wearing Glass, and experienced no confrontations—or even uncomfortable glances. To be fair, things may change if the device, and its video capabilities, become more familiar. (See the results of CR's survey on Glass at left.) The website StopTheCyborgs.org, which raises questions on several aspects of wearable technology, maintains that harm is done even if the camera isn't in use. Its statement on Glass reads, "The issue is not covert recording. Spy cameras exist and the current generation

of Google Glass is not particularly good for covert recording. Rather, the first issue is that wearable devices socially normalize ubiquitous surveillance. That is, they create a society where we expect to be recorded, where every moment [is to be] shared, documented and data-mined."

**Pirating movies.** Alamo Drafthouse Cinema, a chain of 18 theaters, has banned Google Glass once the lights have dimmed, and in January of this year an Ohio man was pulled out of an AMC theater and questioned by federal law



**POSTED** StopTheCyborgs.org urges businesses to print and display these notices.

enforcement officers who suspected he was recording the movie. **Yes, but:** Glass would be a poor way to pirate a movie—works that are illegally downloaded these days tend to be high-quality copies of a source file, not the shaky recordings of a big screen that were sometimes circulated in the past.

**Driving safety.** Several states are considering bans on the use of Google Glass and similar technologies by drivers. Distracted driving reportedly caused 3,328 deaths in 2012, the last year for which data from the

National Highway Traffic Safety Administration is available. Forty-four states prohibit text messaging, and 13 have outlawed the use of handheld phones. Glass can be controlled with voice commands—but research studies compiled by the National Safety Council suggest that talking on the phone with a hands-free device is no safer than holding a phone to your ear. Presumably, it would be even more dangerous to use Glass to check e-mail while driving. **Yes, but:** Glass may have some potential to actually improve driver safety. A Glass app called DriveSafe is being developed that purports to sound an alarm if the driver appears to be nodding off. Could heads-up driving directions keep drivers from fumbling with their phones? Maybe. CR has not tested Glass in terms of driver distraction.

**Rudeness.** The fact that Glass rubs many people the wrong way can be inferred from the dozens of articles written about

Glass etiquette. Google developed its own set of guidelines—and it highlights the trouble spots. Among the items on the don't list: "Don't be creepy or rude (aka a 'Glasshole')." That includes not asking permission before shooting stills or video; staring into the screen when you're supposed to be paying attention to the people around you; and leaving the device running in theaters or other locations where people are expected to turn off cell phones. The website glasshole-free.org lists bars and restaurants that ban Google Glass. **Yes, but:** Smart-phone users can be pretty obnoxious, too—no Glass necessary.



# Stop freaking out about retirement

How to worry less and plan better for a secure and satisfying future

**M**AYBE IT'S TIME to retire the word "retirement." For millions of working Americans, the idea of scrapping work cold turkey one day is unfathomable. Reports that workers are saving too little—confirmed by their bank and 401(k) statements—leave many wondering whether the money will last through their lifetime. The beach-chair-in-the-sand retirement ideal is fast becoming an outdated cliché.

CONSUMER REPORTS readers feel the frustration. In a recent survey of more than 24,000 subscribers ages 55 to 75, only 29 percent of those within five years of retirement expressed a high degree of satisfaction with their retirement planning. About 20 percent said they couldn't afford to stop working. Even among those who expect to retire, 40 percent said they hadn't saved enough.

But the news from our already retired readers suggests that some of that worry might be unnecessary. Seventy-four percent said their expenses were in line with or less

than what they expected before retiring. Seventy-one percent told us they were highly satisfied with their retirement. And 83 percent said they wouldn't work again even if given the opportunity.

In fact, we may be better set for retirement than we've been led to believe. The oft-cited Social Security Administration publication series, "Income of the Aged," showing retirees' high dependence on Social Security, underestimates retiree income by about 15 percent, say researchers and former SSA officials Andrew Biggs and Sylvester Schieber. That's because it excludes most income from individual retirement accounts and other savings. More sophisticated but less well-known models used by the SSA show that current and future retirees as a whole have relatively small savings shortfalls, Biggs says.

For doubters and late-to-the-party savers, planning and perseverance can make a difference. Moreover, our survey found that many readers are choosing an ever-widening

middle path: reducing work hours but not stopping, opting for paid pursuits more about passion than a paycheck, and focusing on schedule flexibility. That gradual slowdown can be a balm to the mind and a boon to the wallet, and may help you live longer and be healthier and happier, too.

## Start by being realistic

If you have postponed looking in your money mirror, you're not alone. Sixteen percent of preretired respondents said they had done no financial planning at all.

Taking that first step can be scary, but knowledge is power. Determining how much you'll need can help you reach your goals or adjust your expectations. And it turns out that getting real about retirement is a key to satisfaction. In our survey, retirees with less than \$250,000 in savings who had properly estimated their financial needs were more satisfied than those with more than \$1 million who had misjudged them.

Roberta Duncan, 60, says good planning

and prudent saving allowed her to retire four years ago. At the time, her husband, Dave McRae, now 55, had just lost his job. The high cost of living in Cerritos, Calif., plus other factors convinced them it was time to make a radical move. The couple consulted their financial planner and determined that with Duncan's teacher's pension and continuing health coverage, they were well set up for a longed-for adventure, even though their nest egg was in the low six figures. So they sold their house, invested the proceeds, and bought a 26-foot recreational vehicle. For the past four years they have been road warriors, logging about 70,000 miles.

To get a preliminary read on your retirement needs, use an online calculator. More than one-third of the respondents who expect to retire in five years told us they had tried one. A comprehensive one we've tested is the free Retirement Income Calculator on investment company T. Rowe Price's website. We like its straightforward approach.

An important figure you'll need to enter into any calculator is the percentage of income you'll need in retirement. Taylor Gang, a certified financial planner and principal at



## RETIREMENT HOT SPOTS

Retirees surveyed ...

**35%**

Relocated in retirement

**19%**

Moved out of state

### Top retirement spots

Florida 22%

North Carolina 14%

Arizona 8%

South Carolina 7%

Colorado 6%

Evensky & Katz in Coral Gables, Fla., echoes many advisers who say that expenses in the early years of retirement can equal or even exceed those while working. "You have more time to play golf and travel," Gang says. "That costs money." Our own survey supports an 80 to 90 percent rule of thumb. Though a

third of retirees reported no change in their spending in the year they retired, 44 percent said their expenses were lower. Most saw a drop of between 10 and 20 percent.

Once you have an estimate, talk with a financial adviser. We recommend finding a fee-only planner at websites such as Garrett Planning Network ([garrettplanningnetwork.com](http://garrettplanningnetwork.com)) and the National Association of Personal Financial Advisors ([napfa.org](http://napfa.org)).

### Play catch-up the right way

Daniel Walk knows that the early bird lays a bigger nest egg. The 25-year-old from Pittsburgh taught himself investing as a teenager, and now his holdings are in the mid-five figures. Walk, who's studying to be a chartered financial analyst, recently showed his 23-year-old sister Sarah, a musician, how to invest in low-cost index mutual funds through a Roth IRA. That works well for younger and lower-earning investors; they don't pay taxes while the money grows and in most cases even upon withdrawal, when their tax rates presumably will be higher.

Our survey of retirees corroborates the wisdom of that approach (see "The Benefits

## Why women should think differently about retirement planning

A healthy man of 65 has a 40 percent likelihood of living to age 85, the Society of Actuaries reports, but for a 65-year-old woman, the odds are better than even. Women live longer, so they need their money to last.

Yet social and economic forces—lower average wages, positions less likely to offer pensions or retirement savings options, interrupted careers for child and parent care, and higher medical spending—contribute to a bleaker retirement outlook for women. Their income in retirement is about half that of men, according to the AARP.

### What women can do

Our survey of CONSUMER REPORTS readers found that the more a woman contributes to the household's overall income, the greater say she has about concerns related to retirement. But breadwinner or not, any woman can improve her confidence about money matters and, quite possibly, her chances of living securely in later years. Our suggestions:

- **Educate yourself about investing.** "The Little Book of Commonsense Investing," by John C. Bogle (John Wiley & Sons, 2007), is a useful primer by the founder of the investment giant Vanguard. On [Bogleheads.org](http://Bogleheads.org),

a community of Bogle's followers share insights and advice on a variety of financial topics. WISER ([wiserwomen.org](http://wiserwomen.org)), funded by public and private grants and individual donations, offers simple explanations of investment concepts, such as dollar-cost averaging and mutual-fund expenses. The Securities and Exchange Commission's topic pages ([sec.gov/investor/pubs.shtml](http://sec.gov/investor/pubs.shtml)) provide more information.

- **Don't avoid risk.** Stocks, which carry greater risk and potential for growth, can help savings grow before retirement. In retirement, they can protect a nest egg against inflation. You can reduce unnecessary risk by diversifying your holdings with broad-based stock (equity) index funds. Consider having at least 40 percent of your portfolio at retirement in stock funds. Put the rest into bonds, with a small percentage in cash. (If you're expecting a significant pension, you may be able to hold more in stocks.)

- **Count on a reverse mortgage last.** None of our 22,000 readers reported using this arrangement, which lets homeowners draw from the equity in their homes and stay put for their lifetime. Among the negatives: potentially high up-front fees and the possibility later in life that you

won't be able to keep up with home maintenance, taxes, insurance and other loan requirements. Our advice is to investigate other options first, such as family financing, and to wait as long as possible to borrow. Ask a certified financial planner or other professional to determine whether you can pay required expenses.

### What married women can do

- **Share financial duties and information.**

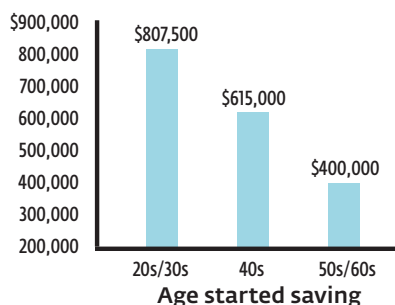
As many a divorced woman or widow knows, depending on a husband to handle all of the finances can backfire once he's no longer in the picture. Make a point of talking with your spouse about day-to-day and long-term finances. Three things to know or have access to: important papers such as wills and car titles; numbers and passwords for all financial accounts; and names and contact information of financial advisers, attorneys, accountants, and insurance companies or agents.

- **Have your own retirement savings.** Even stay-at-home moms can open and contribute to a Roth or traditional IRA as long as they or their spouses earn taxable wages equal to or exceeding those contributions. The maximum annual contribution for 2014 is \$5,500 (\$6,500 for those 50 and older).



## The benefits of an early start

Among retirees in our survey who said they expected to retire within the next five years, those who invested early had far more in savings than those who began late. Waiting until your 40s to start saving will usually reduce your retirement funds by half. Notably, a sizable 14 percent in our survey didn't start saving until they were in their 50s or 60s.



of an Early Start,” above).

But even if you're far behind, you still can start to get a foothold. Making the maximum contribution to a 401(k) or 403(b) account will build up savings fast. Contributing \$10,000 per year from age 50 through 55 would add about \$192,000 to your portfolio by age 67, given a historical average annual rate of return of 8.3 percent for a half-and-half mix of stocks and bonds. (A more conservative portfolio—80 percent bonds, 20 percent stock—would grow by 5.5 percent to almost \$131,000.)

### Try to delay claiming Social Security

Social Security made up a major portion of income of our retired survey respondents. More than half said it was more than 25 percent of their income.

As the Social Security program is currently designed, waiting to claim benefits is the best guaranteed retirement savings plan around. Workers who delay filing until they're 66—the full retirement age for those born between 1943 and 1954—increase their monthly benefits by 8 percent per year until age 70, or 32 percent over four years. But

filing early reduces benefits. A worker whose full retirement age is 66 would have his monthly check cut by 25 percent by filing at 62, the earliest age for eligibility.

Claiming benefits late wasn't the norm among our readers. Of those already retired, 55 percent had started taking benefits at 62. But 52 percent of those not yet retired told us they would claim their benefits at full retirement age; an additional 29 percent said they'd wait even longer.

### Expect the unexpected

At age 65 your chances of living past 90 are one in four, the Social Security Administration projects. In our survey, 43 percent of those not yet retired reported a fear that they'd outlive their money.

Many costs later in life are likely to be health-related. Based on a survey of retirees and preretirees, Fidelity Investments recently projected that an American couple retiring at an average age of 65 would accumulate \$220,000 in unreimbursed medical costs during retirement. Stop work at age 62—before Medicare eligibility—and that figure jumps by \$17,000 per year; continuing to work to age 67 reduces it by \$10,000 per year.

Longevity insurance is a type of annuity that can address that challenge. You pay a single insurance premium up front early in retirement. Then, when you reach the age you have chosen to begin payouts, the policy pays a regular monthly amount for the rest of your life. That could boost your confidence



### What single women can do

- **Research communal living arrangements.** A growing number of single people older than 50 are living with relatives, friends, and acquaintances in a house or an apartment. One person might own the home and rent to others, or a group might buy or rent together. Participants get companionship and safety, and often lower living costs. To find out whether the option might work for you, go to [womenlivingincommunity.com](http://womenlivingincommunity.com) and [nationalsharedhousing.org](http://nationalsharedhousing.org).

- **Tap community resources.** Take advantage of senior resources offered through nonprofits, houses of worship, and county departments on aging. Connecting to those options can be even more important when you live alone. Some communities are setting up “villages,” or supportive networks, for people who don't want to move after they retire. Members who pay dues to Capitol Hill Village in Washington, D.C., for instance, get access to car rides, computer troubleshooting, light housekeeping, social events, exercise classes, lectures, and trips. They also get help when there's a medical crisis, care after a hospitalization, and social services. Volunteers staff the organization. (To find “villages,” go to [vtvnetwork.org](http://vtvnetwork.org).)

- **Keep beneficiary information up to date.** If a husband has forgotten to remove an ex-wife as beneficiary for certain assets such as his life insurance, the money could legally go to her, not to his widow, depending on state law, how the insurance contract is written, and whether it's an employee benefit.

- **Be aware of options for Social Security.** A married or divorced woman may receive more in retirement benefits by claiming a spousal benefit—worth half of her current or ex-husband's Social Security earnings—than by claiming a benefit based on her own work history. If she claims the spousal benefit, she has the option to later claim her own benefit, allowing it to grow in the interim. Go to [socialsecurity.gov](http://socialsecurity.gov) for details.



### SANDWICH GENERATION SQUEEZE

Retirees surveyed ...

17%

provide significant financial support for adult children or elderly parents

\$9,721

is the median spent annually to support other adults



about spending the remainder of your money knowing you'll be covered later.

The thought of plunking down a chunk of your retirement savings toward an uncertain need may not be appealing, but a recent Treasury Department announcement could make it more palatable. IRA and 401(k) participants can now invest 25 percent of their account balances—up to \$125,000—in longevity annuities within their retirement plans without having to start taking the money out at age 70½, when required minimum withdrawals must begin. If they die prematurely, their heirs can get the premiums that weren't disbursed in annuity payments. "It's like another level of Social Security, but from an insurance company," says Keith Singer, a financial planner in Boca Raton, Fla.

### Consider a gradual retirement

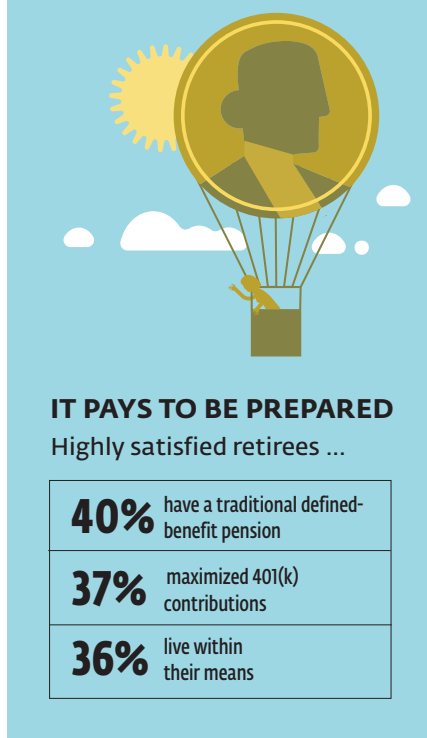
Increasingly, the solution to retirement anxiety is to keep working. Eighty-three percent of preretirees in our survey expected to work full- or part-time.

The phenomenon of a gradual retirement isn't so new. Each year since 2007—before the economic downturn—about a quarter of our fully retired respondents have reported starting their retirement by working less, not stopping entirely. They reduced hours at their main job, worked part-time at a new one, or started a business. They worked for a median of four years. The most satisfied partly retired respondents worked 9 hours or less per week.

Laboring longer provides more income and delays when you begin withdrawing from savings, allowing more time for growth. And for many, it keeps those synapses firing.

Jack "Trip" Rockafellow, 70, who retired from a legal career in 2006, is now using his time to scratch an old itch—and make a bit of cash. Since mid-2013, the Dobbs Ferry, N.Y., resident has been working almost weekly as an extra in movies, TV shows, and commercials in and around New York City. He usually earns \$88 for 10 hours of work per day. Occasionally, he's featured more prominently. (He walked a character named Mia down the aisle in a "Nurse Jackie" episode.) He doesn't clear much, but he finds the work more fun and less stressful than being a lawyer.

Be aware, though, that part-time work has an impact on Social Security. If you haven't reached full retirement age but have claimed your benefit, Social Security holds on to \$1 for every \$2 you earn above \$15,480. When you reach full retirement age, it gives that deferred amount back, adding



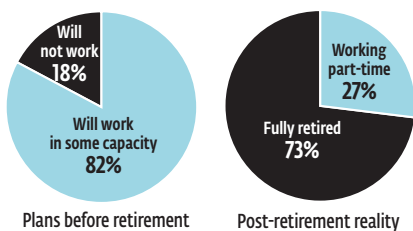
to your monthly benefit.

Working shorter hours at the same employer could affect pension benefits or employer-based group health insurance, so check with human resources before you commit to part-time work.

### Have a plan B

Remember what they say about the best-laid plans? Most of the surveyed preretirees assumed that they would work after retiring, but only a third of retired survey respondents said they actually did. Health concerns or the

### Expectations meet reality



**Baby boomers might imagine a future retirement that involves work of some kind, but the reality might be strikingly different. Eighty-two percent of those in our survey who expected to retire within the next five years said they would probably continue to work in some capacity. But among retirees no longer working full-time, almost three-quarters weren't working at all. And 83 percent of those reported no interest in working again.**

needs of a partner might interfere. Or you might just decide that you have had enough. Whatever the case, you might need to adjust your expectations and your budget.

Wilma (Billie) Andrews, 64, had a revelation three years ago while toiling as a systems analyst. She was tired and ready to quit, but she kept working to pay for future bucket-list trips. "But my dreams were bigger than my bank account," she says.

Finally, Andrews, who lives in Seven Hills, Ohio, decided to punt those goals and retire. Right away, she felt relief. She says she now wakes up almost every day with anticipation. She visits grandchildren, gardens, and does home-improvement projects. She has ridden her motorcycle to Florida. Her financial planner said that with her small pension and savings of about \$300,000, she should do OK. "I'm not where I thought I would be, but it's fine," she says. The decision to leave work "was a tiny light at the end of the tunnel that just got bigger and bigger."

### Smell the roses

Your mother probably told you that money doesn't buy happiness, and our data prove it. Our survey found that retirement satisfaction was significantly higher among households reporting between \$400,000 and \$1 million in savings than among those with less. But happiness didn't rise much more for those who had \$1 to \$2 million. And we found that people are often perfectly content with far less. In fact, retirees with less than \$250,000 in savings who were highly engaged socially were more satisfied with their circumstances than retirees with \$1 million or more in savings who were not. And numerous studies have found a connection between social engagement and better cognition in elderly people.

Jim Plummer, 74, and his wife, Ruth, 72, have assets that fall below the \$500,000 to \$1 million sweet spot. But the couple, who live in Highland, Ill., have made the most of their retirement years by volunteering. Several times each year they travel to different parts of the U.S. to help a Christian group that rehabilitates buildings and houses for individuals and families. Sometimes they're hammering boards, other times they're planting gardens. They're meeting like-minded people and feeling good about their contributions.

"It's neat doing what you know how to do, meeting great people," Jim Plummer says. "I tell friends who want to retire, you can't just sit around and watch TV. Have something you really want to do."

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# The great fish debate

The government wants us to eat more seafood. But consuming too much of certain species could put you at risk for mercury exposure. A CONSUMER REPORTS exclusive.

**W**HEN YOU GRILL a piece of salmon or have a fish taco for lunch, you're getting a good source of high-protein food that provides important nutrients. And if you're a woman who is pregnant or nursing, that fish contains important fuel for your baby's brain development.

In fact, fish is seen as such a beneficial food that the Food and Drug Administration and Environmental Protection Agency recently came out with proposed new guidelines recommending that women of childbearing age and young children eat more of it. But if Americans follow those guidelines without careful attention to which species they are consuming, they could end up taking in too much mercury.

The latest federal proposal encourages women who are pregnant, breast-feeding, or trying to become pregnant to eat between 8 and 12 ounces of fish per week, and suggests a minimum weekly quota for young children, too. This marks the first time those agencies have set a firm minimum level for weekly fish consumption, including shellfish.

Though the agencies say consumers should seek out fish that are

low in mercury, almost all seafood contains the toxin in varying amounts, and getting too much of it can damage the brain and nervous system. That is especially true for fetuses, but children and adults who eat too much high-mercury seafood also can suffer harmful effects such as problems with fine motor coordination, speech, sleep, and walking, and prickly sensations.

CONSUMER REPORTS' food-safety experts analyzed the FDA's own data that measures mercury levels in various types of seafood. From that we identified almost 20 seafood choices that can be eaten several times per week, even by pregnant women and young children, without worrying about mercury exposure.

However, CR disagrees with the recommendations from the FDA and EPA on how much tuna women and children may eat. (We don't think pregnant women should eat *any*.) We also believe the agencies do not do enough to guide consumers to the best low-mercury seafood choices. To make decisions easier for consumers, our chart on the facing page gives advice about good low-mercury choices.

"We're particularly concerned about canned tuna, which is second only to shrimp as the most commonly eaten seafood in the U.S.,"

# Good choices if you want more fish

Below are low-mercury fish that anyone can eat frequently. We have also considered environmental and sustainability concerns for these recommended lists, which are a result of our analysis

of FDA data. A few fish, such as clams and anchovies, appear to be low in mercury but didn't make our lists because the FDA tested so few samples.

## Lowest-mercury fish

A 132-pound person can safely eat 36 ounces per week.

A 44-pound child can safely eat 18 ounces per week.



Wild and Alaska salmon (canned or fresh)



Shrimp (most wild and U.S. farmed)



Sardines



Tilapia <sup>1</sup>



Scallops <sup>2</sup>



Oysters <sup>2</sup>



Squid <sup>1</sup> (domestic)

## Low-mercury fish

A 132-pound person can safely eat up to 18 ounces per week.

A 44-pound child can safely eat up to 6 ounces per week.



Haddock



Pollock



Flounder and sole (flatfish)



Catfish <sup>1 3</sup>



Trout <sup>3</sup>



Atlantic mackerel



Atlantic croaker



Mullet



Crawfish (domestic)



Crab <sup>2</sup>

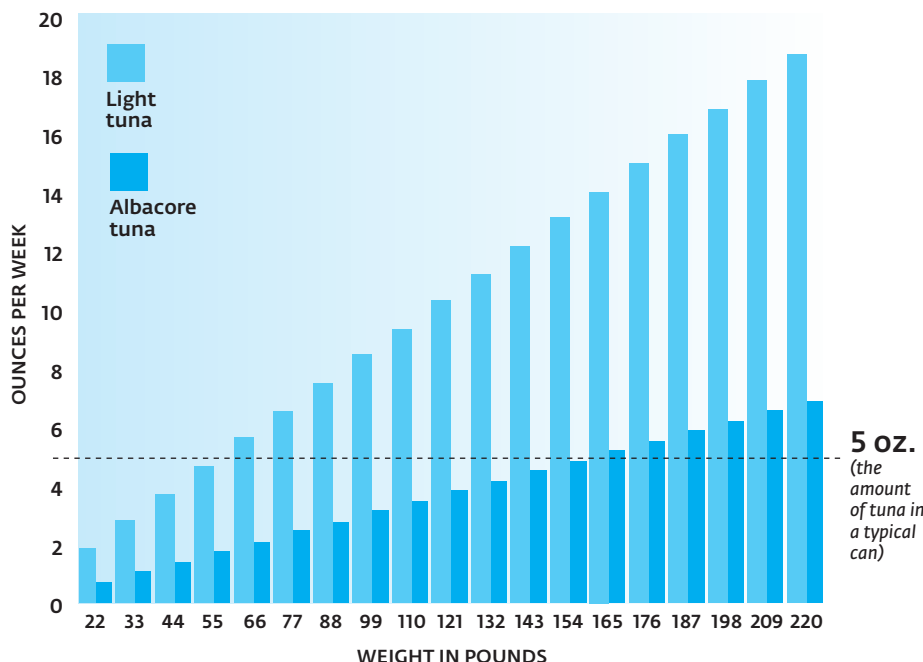
<sup>1</sup> You may want to consider country of origin and choose domestic rather than imported if possible.

<sup>2</sup> Always follow any local alerts regarding when shellfish can be safely harvested and eaten. Eating shellfish raw always carries additional risks of foodborne illness, and it's not recommended for vulnerable groups.

<sup>3</sup> If wild caught (which includes being fished from local rivers and lakes), check with your state health department for information about PCBs especially for these fish; it's a good idea to check for anything on this list if you are concerned about PCBs.

# How much canned tuna can you safely eat?

Ounces of canned tuna that are safe per week by body weight.\*



\*Chart does not take other mercury exposure into account.

## Swim away from these

The FDA and EPA say most women and young children should avoid the first four highest-mercury fish below. They're considering adding the last two to the list. If you are a frequent consumer of any type of fish—24 ounces or more per week—CR suggests that you avoid the fish below as well.

To minimize your mercury intake, limit your consumption of these higher-mercury fish.

Grouper  
Chilean sea bass  
Bluefish  
Halibut  
Sablefish (black cod)  
Spanish mackerel (Gulf)  
Fresh tuna (except skipjack)

Swordfish  
Shark  
King mackerel  
Gulf tilefish  
Marlin  
Orange roughy



says Jean Halloran, director of food policy initiatives for Consumers Union, the advocacy arm of Consumer Reports. Given its popularity and its mercury content, canned tuna accounts for 28 percent of Americans' exposure to mercury, according to an analysis by an EPA researcher published in 2007.

### How much is too much?

When the FDA and EPA last issued recommendations about seafood, in 2004, they advised women of childbearing age to eat no more than 12 ounces of fish per week because of concerns about exposure to mercury.

Though the agencies are still recommending that upper limit, they now are adding minimum weekly quotas, in part because recent research the FDA conducted indicated that one in five pregnant women had eaten no fish at all in the previous month and the majority of those who did had less than 4 ounces per week. In announcing the updated advice, the FDA's acting chief scientist, Stephen Ostroff, M.D., said, "The latest science strongly indicates that eating 8 to 12 ounces per week of a variety of fish lower in mercury during pregnancy benefits fetal growth and development." The proposed guidelines will be discussed in upcoming public meetings.



Other than the new advice on minimum weekly fish consumption, most of the other federal recommendations are essentially the same ones given in 2004. The agencies advise that young children and women of childbearing age avoid four fish with the highest mercury levels: swordfish, shark, king mackerel, and tilefish from the Gulf of Mexico. They are also considering adding marlin and orange roughy to that list.

Our safety experts agree that those women and children should avoid high-mercury seafood. We also suggest that *anyone* who eats 24 ounces or more of fish per week should steer clear of high-mercury choices.

The dietary safety limit for methylmercury (a form of mercury that builds up in fish and shellfish) set by the EPA is 0.1 microgram per kilogram of body weight per day. Based on that, a blood level of 5.8 micrograms per liter of blood is what the agency considers a maximum acceptable level. But that guideline was set more than a decade ago. Some scientists and consumer safety advocates believe it should be changed because several studies published since then say adverse effects could occur at lower mercury blood levels.

Deborah Rice, a former senior risk assessor for the EPA, thinks the limit should be lowered. Rice, who co-wrote the EPA document that established the current limit in 2001, says, "Based on newer studies showing harm from mercury at lower doses, there is no question that 5.8 micrograms is too high." She suggests that the acceptable level should be lowered to 2 or 3 micrograms of mercury per liter of blood.

But even using the EPA's current levels, some of the agencies' advice on fish consumption still causes concern. For instance, the new recommendations allow pregnant women to have up to 6 ounces of albacore (white) tuna weekly.

The average mercury levels in the FDA data

## Sick from sushi: A fish lover feels the effects of mercury

Richard Gelfond liked to play tennis, but he noticed he was having trouble keeping his balance. That's when he decided it was time to seek medical advice about the mysterious symptoms he'd been experiencing, which included a feeling of numbness in his lips and tingling in his feet.

Gelfond, of New York City, who is chief executive officer of the innovative motion picture company Imax, consulted several doctors, who also were baffled until one of them finally asked him whether he ate a lot of seafood.

He certainly did. Gelfond often had fish for lunch and dinner as part of a low-calorie, low-cholesterol diet. And he primarily ate swordfish, tuna steaks or sushi, and Chilean sea bass, all of which tended to have moderate to high levels of mercury. The blood test his doctor ordered revealed that Gelfond's mercury level was 13 times as high as the 5.8 micrograms of mercury per liter of blood that EPA officials consider a safe level.

"When my test results finally came back, my balance had gotten so bad I

couldn't cross the street without help, but I never suspected it was caused by all of those tuna steaks, swordfish tacos, sushi lunches, and other fish meals I was eating as part of what I thought was a healthier diet," Gelfond says.

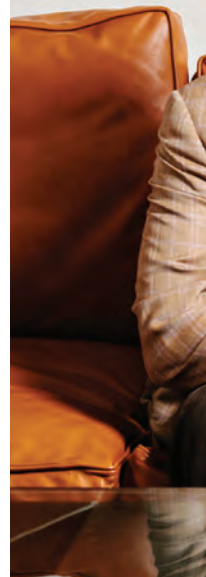
Almost 10 years have passed since he received the diagnosis of mercury poisoning, and Gelfond says he still loves fish. But he's careful to choose lower-mercury options such as flounder, scallops, and shrimp, and he opts for sushi made with salmon rather than tuna. Though his blood mercury level has dropped to 15 micrograms, symptoms such as feeling off-balance still occasionally resurface, especially when he is tired.

As a physician and professor of environmental and occupational medicine at Rutgers Robert Wood Johnson Medical School, Michael Gochfeld, M.D., Ph.D., has been involved in mercury research for 40 years and says he has seen patients suffering mercury poisoning symptoms at blood levels of only 40 or 50 micrograms per liter, but another

patient he evaluated recently had no symptoms even though he had a mercury blood level of 150 micrograms from frequent consumption of a variety of fish that he caught himself.

When patients show symptoms, Gochfeld advises that they stop eating fish altogether at first, then begin incorporating low-mercury fish into their diet after their mercury blood levels drop to low levels, which usually occurs within three to six months. For most patients, the symptoms will go away as the mercury level falls, but in serious cases, health might improve but not necessarily return to normal.

Because of his experience, Gelfond provided funding to a center at Stony Brook University in New York to research health effects from dietary exposure to mercury. "I was sure what happened to me could be happening to others," Gelfond says. "I wanted to raise public awareness about the risks of mercury overexposure for adults so that they could be diagnosed more quickly than I was."



TOP: JAVIER LARREA/GETTY IMAGES; BOTTOM: AXEL DUPEUX



we analyzed indicated that a 125-pound woman would exceed the EPA's "safe" consumption limit for mercury by eating just 4 ounces of albacore tuna. A 48-pound child would exceed the limit eating any more than 1.5 ounces (about a third of a can).

The agencies also include canned light tuna as a lower-mercury choice that consumers can eat to meet the minimum weekly fish quota. According to the National Fisheries Institute, light tuna accounts for about 70 percent of canned-tuna consumption in the U.S. Though canned light tuna on average has only a third of the mercury that albacore has, the FDA's data show that 20 percent of the samples it tested since 2005 contained almost double the average level the agency lists for that type of tuna. And the highest level of mercury in its samples of canned light tuna exceeded the average mercury level for king mackerel.

There's no way for pregnant women to tell which cans have the higher spikes of mercury, which can potentially damage the brain of an infant in the womb at a critical stage of development. "The brain undergoes a series of complex developmental stages that need to be completed in the right sequence and at the right time," explains Philippe Grandjean, M.D., an adjunct professor at the

Harvard School of Public Health and a leading researcher. A mother's intake of methylmercury when she eats fish could reach the fetus within hours and may leave a permanent deficit at a critical time, he says.

CONSUMER REPORTS has said for some time that canned light tuna is not a good low-mercury choice and that pregnant women should not eat any tuna at all. Nothing in the new federal testing data or advice has given us cause to change that view, which also is shared by some scientists, such as Rice.

In fact, our recent analysis of the FDA's mercury testing data has prompted us to add a new piece of cautionary advice about another form of tuna.

Certain types of tuna—such as yellowfin and big eye tuna, also known as "ahi"—used in sushi are especially high in mercury. FDA data show that many samples have levels comparable to shark and swordfish, which FDA advises pregnant women and other vulnerable groups to avoid entirely.

Our food-safety experts are recommending that young children, women of childbearing age, and anyone who eats a lot of fish—24 ounces per week or more—should avoid eating sushi made with tuna and opt instead for sushi made with low-mercury fish.

## The FDA's view

In a statement to Consumer Reports, the FDA explained the rationale for its advice. "Based on a review of the latest science, we have concluded that it is possible for pregnant and breast-feeding women, and women who might become pregnant, to increase growth and developmental benefits to their children by eating more fish than these groups of women typically do," the agency said. "This can be done while still protecting them from the potentially harmful effects of methylmercury in fish."

## How does mercury get into fish?

Mercury levels in the northern Pacific Ocean have risen about 30 percent over the past 20 years and are expected to rise by 50 percent more by 2050 as industrial mercury emissions increase, according to a 2009 study led by researchers at the U.S. Geological Survey and Harvard University.

Mercury-containing plants and tiny animals are eaten by smaller fish that are then gobbled up by larger fish, whose tissue accumulates mercury. That's why larger, longer-living predators such as sharks and swordfish tend to have more of the toxin than smaller fish such as sardines, sole, and trout.

In comments submitted to federal health officials earlier this year, a group of scientists and policy analysts pointed out that a 6-ounce serving of salmon contains about 4 micrograms of mercury vs. 60 micrograms for the same portion of canned albacore tuna—and 170 micrograms for swordfish.

When you eat seafood containing methylmercury, more than 95 percent is absorbed, passing into your bloodstream. It can move throughout your body, where it can penetrate cells in any tissue or organ.

## MORE HELP ONLINE

A useful tool to help you make safer seafood choices is the "Got Mercury?" calculator, which can be found at [ConsumerReports.org/cro/mercury1014](http://ConsumerReports.org/cro/mercury1014). Enter the types and amount of fish you plan to eat for the week, along with your body weight, and you'll see whether you'll be exceeding the safe dietary limit for mercury.



## How you can take action

The FDA and EPA are seeking feedback on their proposed guidelines on fish before they are made final. Consumer Reports believes the agencies should:

- Advise pregnant women to avoid eating any tuna, including canned light tuna.
- Delete its recommendation that women of childbearing age can safely eat up to 6 ounces of canned white (albacore) tuna per week.
- Include anyone who eats more than 24 ounces of fish per week among the vulnerable groups and develop advice for them to avoid overexposure to mercury.

Make *your* voice heard by asking the agencies to improve their advice about tuna consumption and require that their cautionary advice be posted where fish is sold so that it's easier to make the right choices to minimize mercury exposure.

To submit comments online, go to [regulations.gov](http://regulations.gov) and type FDA-2014-N-0595 in the search field.



**HOOKED**  
Imax CEO Richard Gelfond still has some problems from mercury exposure.

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# House warming

Fuel prices are on the rise. Keep costs in check with our Home Heating Guide, including answers to your most burning questions—plus the best space heaters, thermostats, windows, and more.



## What's the cheapest type of heating fuel?

Prices are in constant flux, and they vary by region. Natural gas, the most common fuel type, cost the average U.S. household about \$660 last winter. Based on current energy prices, heating with oil would cost \$1,590; propane would cost \$1,750, and electricity, \$2,135.

If your system is over 15 years old, it's worth upgrading to more efficient equipment and perhaps a different fuel source. Switching to natural gas costs about \$10,000, but you could recoup that in seven years if you include your water heater. Geothermal heat pumps, which use the Earth's constant temperature to heat and cool, are another option. Average installation is \$17,000, but a federal tax credit covers 30 percent, lowering the payback period to between 5 and 10 years.

## Do I need to get my ductwork cleaned?

Unless dust, mold, or signs of vermin are visible, cleaning your ducts is unlikely to improve your home's efficiency—or air quality. That's despite aggressive sales tactics that can cross the line into false advertising, according to the Better Business Bureau.

But duct sealing is a great way to improve efficiency, because 25 to 40 percent of conditioned air is lost through ducts that leak. You'll need to hire a pro, but sealing can save hundreds of dollars per year. Traditional methods treat leaks from the outside with tapes and mastics. A newer technology, called aerosol sealing, was developed by the Lawrence Berkeley National Laboratory. Microscopic particles of sealant are blown into ductwork, where they form airtight bonds over leaks, according to Aerosol, which owns the patent. The average cost is \$1,500 to \$2,500, with promised annual savings of \$250 to \$850, the company says. Learn more at [aeroseal.com](http://aeroseal.com).

## How often should I have my heating system serviced?

We recommend once per year, ideally before it's taxed by cold weather. Make sure the contractor has proper certification; North American Technician Excellence, or NATE, is one. The Air Conditioning Contractors of America has a national directory, at [acca.org](http://acca.org). Consider entering into a service contract, which might cost \$100 to \$400, so that you don't have to remember to schedule a call. If you have a forced-air system, help it run efficiently by changing the filters several times throughout the winter. Also make sure the registers aren't blocked by furniture.

## What's the best way to deal with drafts?

A professional energy auditor will run a blower door test to find leaks. The service costs \$250 to \$800, though rebates apply; check the Database of State Incentives for Renewables & Efficiency, at [dsireusa.org](http://dsireusa.org).

You can also do a low-tech draft test using an incense stick. Turn on all of your home's exhaust fans and hold the stick near windows, doors, and electrical outlets. If the smoke blows sideways, you've got a leak that should be plugged with weather stripping, caulk, or expandable foam. Go to [energy.gov](http://energy.gov) for more information.

## How can I tell if I have enough insulation?

Climb up into the attic with a ruler. There should be at least 11 inches of fiberglass or rock wool insulation, or 8 inches of cellulose insulation. That goes for the attic hatch as well as the floor.

Before laying insulation, it's important to seal any openings in the floor, including those around plumbing vents and electrical boxes. That will prevent the so-called stack effect, in which heated air escapes through the attic and is replaced with cool air from lower levels, leading to drafty rooms and elevated heating bills.

[Read on for more heating-related Q&As.](#)



# Window shopping

A guide to choosing and installing new windows, plus how to make old ones more energy-efficient

**CONTRARY TO WHAT** some ads say, saving money on your energy bills is not the reason to replace your windows. That's because it could take decades to recoup the \$8,000 to \$24,000 you'll spend on new windows and installation. Energy Star-qualified windows can lower your energy bills by 7 to 15 percent. That's only about \$27 to \$111 per year for a 2,000-square-foot, single-story home with storm or double-pane windows, or \$126 to \$465 if that home has just single-pane windows. So why bother?

New windows can make your home quieter, more attractive, and less drafty, and they don't need painting. They're also easier to clean than old windows with combination storm and screens and can reduce your carbon footprint.

To check which windows can keep out rain and wind without leaking, we tested 21 double-hung and four casement-style windows, two of the most popular configurations. We found significant differences between brands in types and frame materials. Working with an outside lab, we subjected the windows to heavy, wind-driven rain and winds of 25 and 50 mph at outdoor temperatures of 0° F and 70° F.

Replacing windows involves many decisions, starting with whether you should get new ones. We help you figure out whether the windows you have can be improved and tell you how to fix them. If you want new windows, we'll help you choose the best ones for your home and avoid shopping and installation problems. Here's what you need to know.

**Price doesn't indicate performance.** Among double-hung clad wood windows, the pricey and bottom-rated Andersen A Series, \$500, wasn't good at keeping out cold air and was so-so at keeping out rain. The \$450 Kolbe Latitude vinyl double-hung was impressive, but the top-rated \$260 Simonton Pro-Finish Contractor was even better. All of the casement windows aced all tests. Prices varied by frame material; the top-scoring American Craftsman vinyl window, \$260, is the least expensive casement. All prices are for a 3x5-foot window.

**Match windows to climate.** Look at the overall scores in our Ratings, then zero in on test results that apply to where you live. If your home is exposed to high winds and cold temperatures, look for windows that were excellent at low-temperature wind resistance. Check out our climate-specific picks on page 39.

**Don't overspend on options.** Upgrades can easily add 50 percent or more to the base cost of a window. Focus on features that add value. Low-E coatings improve efficiency, but triple glazing probably isn't necessary unless you live in an extremely cold climate. Double-hung window sashes that tilt in make cleaning easier, and full screens allow optimum airflow when the top window is lowered and bottom window raised. Finer meshed screens let more light through and do not obscure the view as much as standard screens. See "Tallying the Cost of Added Features," on page 37, to get an idea of what many typical upgrades cost.

## Anatomy of a window

**1. Frame** provides structure.

**2. Cladding** protects the exterior of a wood or composite window and is made of vinyl, aluminum, or fiberglass, eliminating painting.

**3. Sash** is the moving part of the window; it can be tilted in for easy cleaning.

**4. Insulated glass** Double-glazed windows have a sealed space between two panes of glass filled with air or another gas that insulates better than air. Argon gas is standard on many windows, but the energy savings won't justify paying extra for it.

**5. Low-E coating** is transparent and improves the efficiency of the glass by reflecting heat yet letting light in. The coating is applied to the outside of glass in warmer climates to reflect the sun's heat out; in colder areas, it's applied to the inside glass to keep heat in.

**6. Grilles** are decorative and are available in different patterns to match architectural styles.



### Repair or replace?

Before you start shopping for new windows, you need to know what can be fixed or done to make your windows more energy-efficient. Our experts can help.

### Where to start?

Inspect your windows for decay. A pro might be able to repair rot, jammed sashes, and broken parts. See signs that water has penetrated around the frame? The windows need to be removed and repaired before they rot. If the sashes stick, rub the bottom of a white candle against the bottom and sides of the window so it will slide better in the channel. If there's condensation between layers of insulated glass, you'll need to replace the

sash or the window, which may be covered by your warranty.

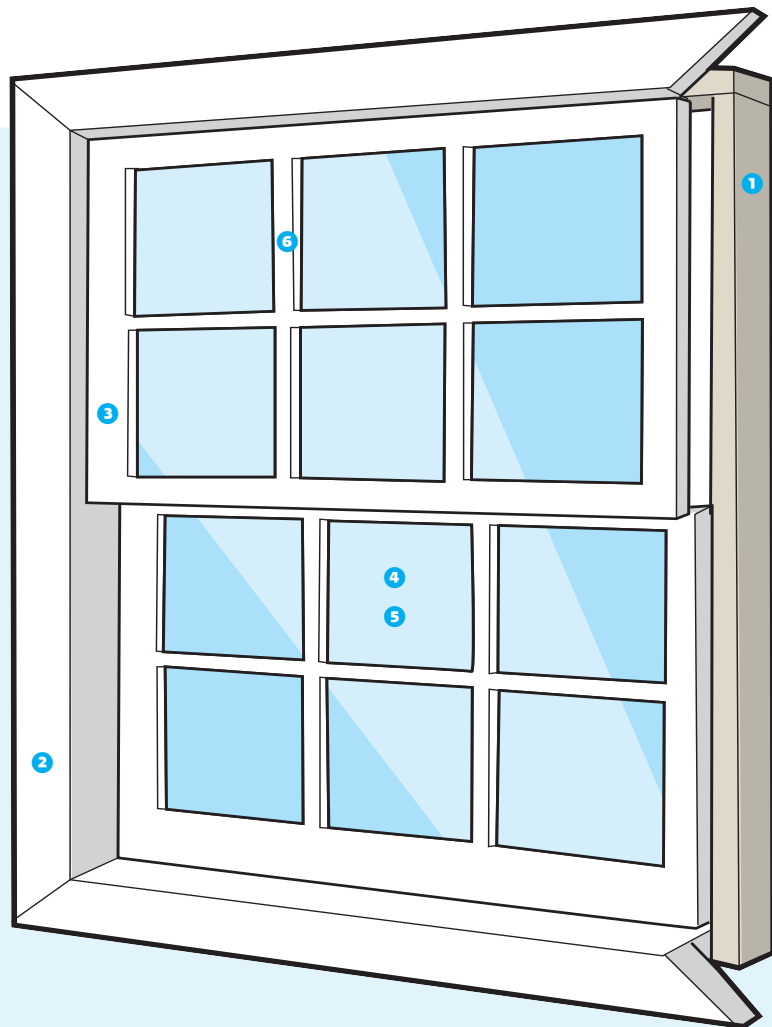
### Any precautions?

Lead-based paint was banned after 1978 and is especially common in homes built prior to 1960. Single-pane windows are a real concern because the friction of opening and closing the sashes can release lead dust and result in lead poisoning in children. An experienced contractor can suggest remedies for hazardous paint

removal. Replacing these windows eliminates the lead risk but can increase lead dust during the project. If your contractor will disturb lead-based paint, he must be trained in lead-safe work practices. Check the EPA's website for certified professionals.

### How can I make my old windows more energy-efficient?

Caulking and weather stripping help reduce drafts. Remove old



You'll see these numbers on Energy Star and National Fenestration Rating Council (NFRC) window labels:

**U-factor**, or U-value, usually ranges from 0.20 to 1.20. The lower the number, the better the window is at keeping heat in.

**Solar heat gain coefficient (SHGC)** is between 0 and 1. The lower the

number, the better the window is at blocking unwanted heat from the sun. In warm climates you'll want the lowest number you can find; in cold areas a higher number is better.

**Visible transmittance (VT)** indicates how much visible light a window lets in and is between 0 and 1. As the number increases, so does the light.

insulation and can cost less than replacement windows, though they're not as convenient. Interior storms are often more effective than exterior ones.

### Help! Some of my windows are painted shut.

The upside is that this may give you a weather-tight seal in the winter, and depending on your climate, you might want to keep the upper sashes painted shut.

caulk and replace with new caulk using a caulking gun. Outside, caulk between the window molding and house. Inside, caulk around window trim. Apply when humidity is low and it's above 45° F. Weather stripping helps with air leaks around sashes and should be applied to clean, dry surfaces when the temperature is over 20° F. The weather stripping should compress when sash is shut. Combination storm and screen windows add

## Tallying the cost of added features

Even if you choose budget-friendly windows, upgrades can easily add 50 percent or more to their cost. Here's a look at upgrades and starting prices for a 3x5-foot double-hung window, according to experts at Pella.

### Grilles between the glass (GBG), \$20

Installed between layers of insulated glass, these add a more traditional look, without having to clean individual sections of glass.

### Nonstandard colors for exterior cladding, \$25

**Jamb extensions, \$50**  
The factory adds depth to the window frame when the frame isn't as thick as the wall.

### Hardware-finish upgrades, \$50

Oil-rubbed bronze or satin nickel ups the price.

### Triple insulating glass (triple IG), \$100

Adds a third layer of glass, which reduces

noise significantly. Energy savings are also improved, but not enough to justify the cost in all but extremely cold climates.

### Prefinished interiors on wood windows, \$100

The factory paints or stains the interiors so that you don't have to.

### Simulated divided light grilles (SDL), \$150

Grilles are adhered to both the room side and exterior of the glass for a more authentic look. This may be required in historic districts.

### Impact-resistant glass, \$325

It may be required in hurricane zones. It also reduces noise.

## DID YOU KNOW?

### Window washing

Some manufacturers don't recommend ammonia-based cleaners, such as some Windex products, for cleaning new windows. So check before you spritz.

But for summer days you'll want cool night breezes. Use a sash saw to cut through the paint. Put the saw teeth along the seam that the paint has sealed and slide it along the window. One pass per seam should do it.

### My historic home has its original windows. Should I replace them to improve efficiency?

Windows help define your home's look and can be an

important architectural detail. Replacing windows, especially ones with stained or leaded glass or decorative wood grilles, can lower the house's value. Ask yourself, will the new windows fit your home's style or detract from it? Consider our tips for improving energy efficiency. Your local preservation commission may provide guidelines and suggest skilled craftsmen and contractors who can do repairs.

# Shopping tips

Windows are expensive, and there are lots of decisions to make before you swipe your credit card. Here's what you need to know:

**1 How much needs to be replaced?** If the existing frames and sills are still sound and square, you can use partial (pocket) replacement units. These fully assembled units slip into the existing frames, saving you money on materials and labor. But if your frame or sill is rotted, you'll need full-replacement windows, which include the frame, sill, jambs, and generally a nailing flange that attaches the window to the outside wall around the opening.

**2 Pick a window type.** The style of your house and the existing windows may help you decide. Andersen's online style library for homes shows bungalows, ranches, and seven other house styles, as

well as the type of windows often used for each. The library has great tips on trim color and hardware. We tested two of the most common types, double-hungs and casements. You can change between types, as long as the size is available. On double-hungs the lower inside sash slides up and an upper outside sash slides down, improving air circulation and making full screens ideal. Cleaning is easy, because you can tilt the sash on any of the tested windows. Casements are hinged on one side, like a door, and a crank lets you open them outward, ideal for hard-to-reach areas such as over a kitchen sink. They're usually more airtight than double-hung because the sash locks against the frame to close. When fully open,

casements allow for good ventilation and easy cleaning. Sliders glide on a horizontal track. Awning windows are hinged at the top and open outward, while hopper-style windows are hinged at the bottom and open inward.

**3 Pick a frame material.** Our tests found that there are excellent and mediocre double-hung windows regardless of the frame material, except for fiberglass. Wood frames tend to be the most expensive. All are usually clad in vinyl, aluminum, or fiberglass on the exterior to protect the wood and eliminate painting. Fiberglass-framed windows don't need to be painted.

Vinyl frames are usually the least expensive but aren't as attractive. They don't need to be painted or stained, though colors are limited and can't be changed. Among casements, there was little difference between vinyl and wood frames.

**4 Don't rely on a contractor to choose.** With all the decisions, it's tempting to let the pro decide. But given the cost of new windows, the more you know about them, the better. Use our Ratings and information to guide you. Scour manufacturer websites for ideas. Pella's online design tool lets you pick a window type and then play with details such as finish colors, hardware style, and even wall hues. Go to stores

to see the windows, inspect the frames, and try the handles.

**5 Shop around.** Prices can vary among dealers with the same windows. You might get a better deal in their off-season, usually late fall or winter. Manufacturers also run specials, so check their websites or sign up for alerts. If the windows in your living room or other lived-in areas of your home are broken or unattractive, consider replacing just those windows rather than waiting years to do the whole house. Though there are no federal tax credits planned for Energy Star-qualified windows in 2014 or 2015, some utilities and city and state programs offer rebates or incentives to buy Energy Star windows.

## How to find an expert installer

**Good windows installed badly won't work or look as good as they should. Improperly installed windows could even end up using more energy, not less.**

**Seek certification.** Some major manufacturers recommend installers specifically trained and certified for their products. Using the same contractor for purchase and installation can avoid finger-pointing if problems occur later. If you have the home center install the windows you buy there, find out how complaints are handled. The home center should be willing to help resolve problems with its contractors to your satisfaction. Look for certification from the American Window and Door Institute—you can check credentials at [awdi.com](http://awdi.com)—or InstallationMasters at [installationmastersusa.com](http://installationmastersusa.com).

**Do your due diligence.** Even if the installer is certified or manufacturer-trained, you still need to check references and the Better Business Bureau's website for ratings and comments. Ditto for those you find on services such as Angie's List. Ask for the full name and address of the company, how long it has been in business, and proof of insurance carried and licensing if required in your state. Does the company offer a warranty on its work?



**Know what to expect.** A seasoned installer should tell you about how long the job will take. Ask about the process. It's better if each new window is put in right after the old one is removed. Insist that the installer measure each replacement window before ripping out the old. You don't want a boarded-up hole while you're waiting for the right window to arrive. Think twice about using a contractor who removes all the old windows first and then installs the new windows. If there are any problems, you could be left with lots of holes in your walls for days or weeks.

**Focus on details.** Get multiple bids and scrutinize them. They should include specifics: window brand, number of windows, their size and type, plus any add-on features. It should also include installation details, such as how the windows will be sealed and insulated. Labor and material costs should be broken out. If you want to paint around the windows, have the contractor use acrylic-latex caulk, which can be painted, and not silicone. And be sure your windows work well before the contractor applies interior trim.





A1 Andersen



A2 Pella



B1 Simonton



B3 American Craftsman



B4 Reliablilt



D1 Andersen



E1 American Craftsman

## Overview

All but one of the windows we tested are available as either partial (pocket) or full-frame replacements. Partials use the existing frame. If your window frames are in poor condition, use full replacements.

**CR Best Buy** These blend performance and value. All are recommended.

**Recommended** These models stand out for the reasons below.

### FOR COLD CLIMATES

**A1 Andersen** double-hung, \$310 **CR Best Buy**

**A2 Pella** double-hung, \$300 **CR Best Buy**

**D1 Andersen** casement, \$400

**D2 Pella** casement, \$460

**E1 American Craftsman** casement, \$260

**E2 ThermaStar** casement, \$310

Double-hung windows are the most popular style, and **A1** excelled at low-temperature wind resistance, so your home won't get drafty even when the wind is howling outside. A CR Best Buy, the exterior of the wood window is clad in vinyl. Also consider **A2**, a CR Best Buy. It was nearly as impressive. The wood exterior is clad in aluminum. All casement windows excelled at keeping out cold air and water. The exterior of **D1** is clad with vinyl, and **D2** is clad with aluminum. Cladding means you don't need to paint the exteriors. **E1** and **E2** are vinyl and cost much less, but as with all vinyl, your choice of colors is limited, and they can't be painted or stained.

### FOR RAINY CLIMATES

**A3 Weather Shield** double-hung, \$430

**B1 Simonton** double-hung, \$260

**B2 Reliablilt** double-hung, \$280

**B3 American Craftsman** double-hung, \$170 **CR Best Buy**

Among double-hungs, **A3** aced our rain-resistance tests, so leaks are unlikely. The wood exterior is clad in fiberglass. **B1**, **B2**, and **B3** are vinyl; all were impressive or better in our wind-resistance tests, too. Choose any casement we tested, because they all excelled in every test.

### FOR WARM CLIMATES

**B4 Reliablilt** double-hung, \$190 **CR Best Buy**

Although any of the recommended windows are fine choices for warm climates, **B4** vinyl double-hung is among the least expensive we tested and was impressive at keeping out rain and wind without leaking when it's warm outside.

## Ratings Windows

All tested models In performance order, within types.

● Excellent  
 ○ Very good  
 ○ Good  
 ○ Fair  
 ● Poor

CR Best Buy  
 Recommended

| Recommendation | Rank | Brand & model | Price | Overall score               | Wind resistance 0° F | Wind resistance 70° F | Rain resistance |
|----------------|------|---------------|-------|-----------------------------|----------------------|-----------------------|-----------------|
|                |      |               |       | 0 100<br>P   F   G   VG   E |                      |                       |                 |

**DOUBLE-HUNG** All are available in custom sizes.

| A                                 |  | WOOD  |  |
|-----------------------------------|--|-------|--|
| <div><div></div><div></div></div> | 1 Andersen 400 Series <sup>[1]</sup>               | \$310 | <div><div>81</div><div></div></div> <div><div></div><div></div><div></div></div> |
| <div><div></div><div></div></div> | 2 Pella ProLine 450 Series <sup>[2]</sup>          | 300   | <div><div>80</div><div></div></div> <div><div></div><div></div><div></div></div> |
| <div><div></div><div></div></div> | 3 Weather Shield EnduraShield <sup>[3]</sup>       | 430   | <div><div>79</div><div></div></div> <div><div></div><div></div><div></div></div> |
|                                   | 4 Weather Shield Aspire Series <sup>[1]</sup>      | 350   | <div><div>58</div><div></div></div> <div><div></div><div></div><div></div></div> |
|                                   | 5 Andersen E-Series Talon 3050 <sup>[2]</sup>      | 450   | <div><div>54</div><div></div></div> <div><div></div><div></div><div></div></div> |
|                                   | 6 Kolbe Ultra Series <sup>[2]</sup>                | 600   | <div><div>54</div><div></div></div> <div><div></div><div></div><div></div></div> |
|                                   | 7 Integrity from Marvin Ultrex Clad <sup>[3]</sup> | 480   | <div><div>49</div><div></div></div> <div><div></div><div></div><div></div></div> |
|                                   | 8 Lincoln Fit <sup>[2]</sup>                       | 600   | <div><div>48</div><div></div></div> <div><div></div><div></div><div></div></div> |
|                                   | 9 Andersen A-Series <sup>[2]</sup>                 | 500   | <div><div>47</div><div></div></div> <div><div></div><div></div><div></div></div> |

| B VINYL                           |    |   |     |    |             |             |
|-----------------------------------|----|---|-----|----|-------------|-------------|
| <div><div></div><div></div></div> | 1  | Simonton Pro-Finish Contractor                        | 260 | 83 | <div></div> | <div></div> |
| <div><div></div><div></div></div> | 2  | Reliablilt 3900 Series (Lowe's)                       | 280 | 82 | <div></div> | <div></div> |
| <div><div></div><div></div></div> | 3  | American Craftsman by Andersen 70 Series (Home Depot) | 170 | 78 | <div></div> | <div></div> |
| <div><div></div><div></div></div> | 4  | Reliablilt 3201 (Lowe's)                              | 190 | 73 | <div></div> | <div></div> |
| <div><div></div><div></div></div> | 5  | Kolbe Latitude  | 450 | 72 | <div></div> | <div></div> |
|                                   | 6  | Simonton Reflections 5300                             | 290 | 68 | <div></div> | <div></div> |
|                                   | 7  | Silver Line by Andersen 3000 <sup>[4]</sup>           | 200 | 68 | <div></div> | <div></div> |
|                                   | 8  | Pella 250 Series                                      | 240 | 62 | <div></div> | <div></div> |
|                                   | 9  | Ply Gem Contractor Series 2000                        | 200 | 48 | <div></div> | <div></div> |
|                                   | 10 | ThermaStar by Pella Series 20 (Lowe's)                | 215 | 41 | <div></div> | <div></div> |

| C FIBERGLASS |                              |     |    |   |   |
|--------------|------------------------------|-----|----|---|---|
| 1            | Integrity from Marvin Ultrex | 450 | 65 | ● | ● |
| 2            | Pella Impervia               | 390 | 59 | ● | ● |

**CASEMENT** All are available in custom sizes.

| D                                   |   | WOOD |    |                       |                       |                       |
|-------------------------------------|---|------|----|-----------------------|-----------------------|-----------------------|
| <input checked="" type="checkbox"/> | 1 Andersen 400 Series <sup>1</sup>      | 400  | 95 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> | 2 Pella ProLine 450 Series <sup>2</sup> | 460  | 92 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| E VINYL                             |   |   |     |    |                       |                       |
|-------------------------------------|---|---|-----|----|-----------------------|-----------------------|
| <input checked="" type="checkbox"/> | 1 | American Craftsman by Andersen 70 Series (Home Depot) | 260 | 96 | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> | 2 | ThermaStar by Pella 20 Series (Lowe's)                | 310 | 96 | <input type="radio"/> | <input type="radio"/> |

<sup>1</sup> Exterior clad in vinyl. <sup>2</sup> Exterior clad in aluminum. <sup>3</sup> Exterior clad in fiberglass. <sup>4</sup> Not available as partial (pocket) replacement.

## Guide to the Ratings

**Overall score** is based on wind and rain resistance. An outside lab conducted all tests. **Wind resistance** measures a window's ability to keep out 25- and 50-mph winds at outdoor temperatures of 0° and 70° F. **Rain resistance** measures a window's ability to keep out heavy, wind-driven rain. **Price** is approximate retail for a basic 3x5-foot window. It does not include upgrade options or installation costs.

# Warmth where you need it

## Space heaters that chase away the chills

**SIMPLY HEATING A ROOM** isn't enough for some people. You'll find space heaters disguised as miniature fireplaces and radiators, and many with promises to trim your utility bill in the bargain. But speedy heating, safety, and even quietness are what matter most to shoppers, according to comments on CONSUMER REPORTS' Facebook page and on Twitter. Models that topped our tests meet those needs for as little as \$40.

**High style, including 'flames.'** Crane's EE80750, \$90, and the larger Heat Surge Roll-n-Glow EV.21, \$400, combine quick room heating with a digital flame display. Dyson's AM05, \$400, blends a contemporary oval shape with a fan you can set to oscillate for quick, even heating. But it was the noisiest heater we tested, about as loud as a window air conditioner adjusted to its low setting. And Heat Surge says that the wooden cabinets for its Roll-n-Glow and smaller Accent EV.2, \$300, are Amish-made, but the workmanship looks more like something we remember from shop class.

**Quick comfort—and some slowpokes.** Suppose you value instant warmth for

yourself more than you do for an entire room—or, say, you use a space heater at your desk in a chilly office. CR tests spot-heating speed using a test dummy laden with heat sensors. The small Dyson AM05 and Vornado TVH500, \$150, along with the larger Honeywell HZ-9801, \$190, and the Heat Surge Accent aced that test. But speedy spot heating was a challenge for certain models, including the small Honeywell HZ-370GP, \$50, and Crane EE-8080, \$110, which took a glacial 15 minutes to raise the dummy's 60° F temperature by just about 4 degrees. Most of the others we tested raised it about 11 degrees.

**'Radiator' models leave us cold.** Heaters that look like vintage steam radiators are also a style statement. Manufacturers say they're best for room heating rather than spot heating. DeLonghi claims "fast and flexible heating" for the TRN0812T, \$60, and TRD0715T1, \$75, we tested. But both models were only a notch above the Soleus Air at quickly heating our 200-square-foot test chamber. And both were dismally slow at spot heating objects directly in their path.

## Play it safe

Every space heater we tested has a switch that shuts it off if it tips or overheats. Yet space heaters still account for roughly one-third of all home heating fires and more than 80 percent of associated deaths. And though many were less hot to the touch and have plastic grates rather than metal ones, burns to hands—particularly among kids—remain common. Here's how to keep warm with less risk:

**Keep heaters away from flammable items.** Be sure that pillows, bedding, furniture, drapes, newspapers, and other flammables are at least 3 feet from any space heater.

**Ditch the extension cord.** All tested models have cords at least 6 feet long. Manufacturers warn against using an extension cord because you might trip over it. An extension cord can also raise the risk of a fire, especially if it's worn or its gauge isn't thick enough to properly power the heater.

**Use fueled heaters outdoors.** In addition to emitting harmful fumes, propane and kerosene heaters tend to get much hotter than the plug-in heaters in our Ratings. Use them only on an open porch or in another well-ventilated outdoor area. A safer bet during a blackout: Power a heater or your home's heating system with a home generator. Capable portable models such as the 7,000-watt Predator 68530, \$600, should power most home items.

## HOW TO SHOP FOR A SPACE HEATER

### Check the warranty

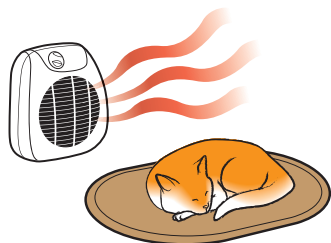
Vornado's small TVH500 and AVH2 have a five-year warranty; most brands offer warranties of just one to three years. That extra coverage could come in handy based on our user reviews, which cite lots of breakdowns for both models. But the reviews also praise Vornado's quick and attentive customer service.

### Don't trust savings claims

Both Vornados are among models that manufacturers claim cut heating costs. Holmes forecasts an annual savings of \$208 for its HEH8031-UM. But because electricity is the priciest kind of heating, no space heater can trim your bill unless you turn down the heat elsewhere in the house—an approach known as zone heating. Instead, have your house checked by a professional, who might suggest adding insulation, especially in the attic floor and any crawl space, to help retain heat in every room of your house.

### Look for smart features

Dyson's slim AM05 can be angled back or forward and, like many models, has multiple speeds. Top-mounted controls, as on the small Vornados, are easy to reach without bending or tipping back the heater, which tripped the tip-over shut-off switch on Honeywell's small HZ-370GP. Many heaters also have timers and remote control. A "frost guard" activates Stadler Form's small Max M-006 and DeLonghi's radiator models at roughly 40° F to keep pipes from freezing. But unimpressive heating speed kept all three off our winners' list.



### Can I use a space heater in a bathroom?

Some are marketed as bathroom-safe. Yet among the models we tested, only the Holmes HFH436 and DeLonghi TRN0812T had ground-fault circuit interrupter plugs intended to prevent electric shock, including in moist areas. Even with the GFCI plug, their manufacturers warn against using the heaters near water.



A1 Vornado



A4 Holmes



A8 Crane



B1 Honeywell



B2 Heat Surge

## Ratings Space heaters

All tested models in performance order, within types.



| Recommendation | Rank | Brand & model | Price | Weight (lb.) | Overall score | Test results |              |             |             |             | Features |                     |             |                        |
|----------------|------|---------------|-------|--------------|---------------|--------------|--------------|-------------|-------------|-------------|----------|---------------------|-------------|------------------------|
|                |      |               |       |              |               | Room heating | Spot heating | Hot surface | Fire safety | Ease of use | Noise    | Multiple fan speeds | Oscillating | Tip-over safety switch |

### A SMALL HEATERS These compact electric models have a fan for faster heating.

|   |    |                        |       |    |    |   |   |   |   |   |   |   |   |   |
|---|----|------------------------|-------|----|----|---|---|---|---|---|---|---|---|---|
| ✓ | 1  | Vornado TVH500         | \$150 | 9  | 86 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 2  | Dyson AM05             | 400   | 5  | 81 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 3  | Vornado AVH2           | 100   | 4  | 76 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 4  | Holmes HFH436 [1]      | 40    | 2  | 72 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 5  | Lasko 6462             | 75    | 7  | 72 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 6  | Vornado iControl       | 150   | 5  | 71 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 7  | Bionaire BCH9212       | 75    | 6  | 71 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 8  | Crane EE80750          | 90    | 13 | 70 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 9  | Ambia ACH-120          | 60    | 5  | 69 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 10 | Stadler Form Max M-006 | 120   | 5  | 68 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 11 | Holmes HEH8031-UM      | 40    | 4  | 65 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 12 | Honeywell HZ-860       | 70    | 7  | 60 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 13 | Honeywell HZ-370GP     | 50    | 4  | 57 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 14 | Crane EE-8080          | 110   | 9  | 54 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 15 | Stadler Form Anna      | 85    | 5  | 52 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 16 | Pelonis HF-N           | 85    | 4  | 49 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 17 | Sunbeam SQH310         | 50    | 5  | 24 | ● | ● | ● | ● | ● | ● | ● | ● | ● |

### B LARGE HEATERS Some of these electric models are styled like furniture; all have fans.

|   |   |                                  |     |    |    |   |   |   |   |   |   |   |   |   |
|---|---|----------------------------------|-----|----|----|---|---|---|---|---|---|---|---|---|
| ✓ | 1 | Honeywell HZ-980 [2]             | 190 | 17 | 74 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 2 | Heat Surge Accent EV.2           | 300 | 37 | 69 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ✓ | 3 | Duraflame 10HM4126-01071 [2]     | 230 | 37 | 68 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 4 | Heat Surge Roll-n-Glow EV.21 [2] | 400 | 38 | 62 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 5 | Edenpure GEN41 [2]               | 397 | 26 | 57 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|   | 6 | Lasko 760000                     | 90  | 15 | 52 | ● | ● | ● | ● | ● | ● | ● | ● | ● |

### C RADIATOR-TYPE HEATERS These resemble the old-fashioned kind but were unimpressive overall.

|  |   |                            |    |    |    |   |   |   |   |   |   |   |   |   |
|--|---|----------------------------|----|----|----|---|---|---|---|---|---|---|---|---|
|  | 1 | Soleus Air HM2-15R-321 [2] | 80 | 11 | 58 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|  | 2 | DeLonghi TRN0812T [1]      | 60 | 17 | 43 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
|  | 3 | DeLonghi TRD0715T1 [1] [2] | 75 | 26 | 39 | ● | ● | ● | ● | ● | ● | ● | ● | ● |

[1] Includes a ground-fault circuit interrupter plug for shock protection around water. [2] Has wheels.

## Guide to the Ratings

**Overall score** includes room- and spot-heating speed, hot surface, fire safety, ease of use, and noise. Scores of previously tested models may have changed because of changes in testing. Scores are rounded; models are listed in order of precise overall score. **Room heating** is ability to heat a 200-square-foot room from 60° F in 15 minutes.

**Spot heating** is ability to heat a person sitting in its path in 15 minutes, using a test dummy with sensors. **Hot surface** gauges risk of a first-degree burn from the heat-exhaust area based on its hottest portion and size and accessibility. **Fire safety** is potential for igniting fabrics based on a terry-cloth test towel. **Ease of use** includes carrying and controls. **Noise** is based on highest fan setting, using a sound meter. **Price** is approximate retail.

## Overview

Top picks offer quick room heating and, for most, speedy spot heating. And like the others we tested, they have a sensor that shuts them off if they overheat. We focus below on those with special strengths, value, or both.

✓ **CR Best Buy** These blend performance and value. All are recommended.

✓ **Recommended** These high-scoring models stand out for the reasons below.

### BEST FOR PORTABILITY

**A1 Vornado** \$150 **CR Best Buy**  
**A3 Vornado** \$100 **CR Best Buy**  
**A4 Holmes** \$40 **CR Best Buy**  
**A8 Crane** \$90

All are compact. **A1** offers speedy spot heating and top-mounted controls. **A3** combines lighter weight with three fan settings, though it lacks a timer. Note that a high number of our user reviews cite reliability concerns about both Vornados, though they're covered wby a long, five-year warranty. **A4** is light and low-priced, and has GFCI protection, though the manual warns not to use the heater in bathrooms or near water. It also sacrifices some spot-heating speed. Choose **A8** if you want a small heater with digital flames and a choice of pastel colors.

### LARGER HEATERS WITH SOME STYLE

**B1 Honeywell** \$190  
**B2 Heat Surge** \$300

Both console models offer speedy spot heating. The sleek, basic black **B1** has a timer and a lighted, top-mounted touchpad for its controls. **B2** trades the timer and some room-heating speed for a wood cabinet and fake-flame display. Both come with a remote, but tiny controls on the Heat Surge could prove to be challenging to use if the remote goes missing.



# Climate controls

## Programmable thermostats get smart

**OUR LATEST ROUNDUP** includes voice-activated models and those that can adjust temperatures based on your location, say, turning up the heat when you're close to home so that it will be toasty when you arrive.

Those innovations could simplify your life, but only as add-ons to a thermostat that's also easy to operate. We found several models that are both intuitive and innovative. Here are the details:

**Connectivity abounds.** More thermostats let you manage your energy use from a smart phone or computer. The Honeywell RTH9590WF, \$300, delivered bug-free connection to our wireless router, plus it's the first voice-activated thermostat, responding to commands such as "make it warmer." The American Standard AccuLink AZone950, \$450, has a graphic display and easy remote access, and the Allure Energy EverSense, \$400, makes changes based on your location.

**Basic models do the job.** If you don't care about remote access, you'll save by choosing a standard thermostat. The Honeywell Prestige HD YTHX9321R, \$250, offers an exceptionally sharp display, and its ease-of-use score was the highest of all tested models. For top value, the Lux TX9600TS, a \$70 CR Best Buy, has basic graphics with touchscreen controls and solid performance.



### What should I set my thermostat to during the winter?

Since central heating went mainstream in the 1960s, the average temperature for occupied rooms is up to 70° F, and overnight temps are around 68° F. For optimal efficiency, those temperatures should be 68° F and 60° F, respectively. Lowering the thermostat could save you \$100 per year. It could also help you maintain healthy body weight. "Temperatures in the 60° to 62° F range burn an extra 100 to 150 calories per day," says C. Ronald Kahn, M.D., professor of medicine at Harvard medical school, who studies the effect of temperature on energy-burning brown fats. "Even if you're only burning 50 calories a day at higher temperatures, that's still half a pound of fat every month."



A1 Honeywell



A2 American Standard



B2 Lux

## Ratings

**All tested models** In performance order, within types.

- Excellent
  - Very good
  - Good
  - Fair
  - Poor
- ☒ CR Best Buy  
☒ Recommended

|                | Brand & model  | Price | Overall score | Test results       | Features              |
|----------------|--|-------|---------------|--------------------|-----------------------|
| Recommendation | Rank   |       |               | Ease of use        | Ease of remote access |
|                | Similar models, in small type, are comparable to tested model. |       |               | Display clarity    | Graphic display       |
|                |  |       |               | 7-day programmable | Warranty (yr.)        |

### A THERMOSTATS WITH REMOTE ACCESS

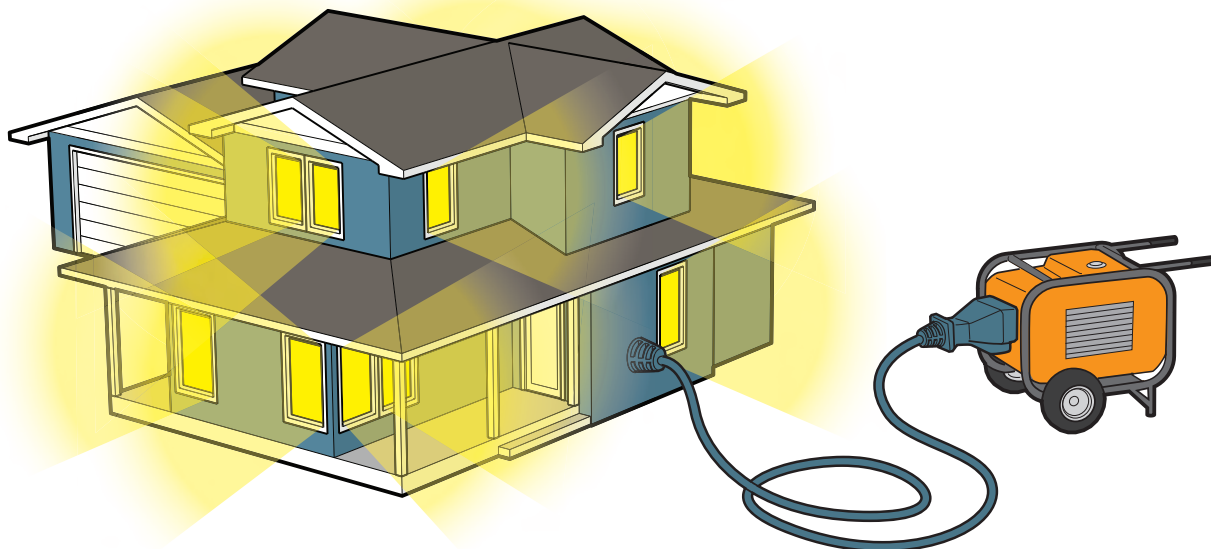
|                                     |    |   |       |    |   |   |   |   |   |    |
|-------------------------------------|----|---|-------|----|---|---|---|---|---|----|
| <input checked="" type="checkbox"/> | 1  | Honeywell RTH9590WF                                     | \$300 | 90 | ● | ● | ● | ● | ● | 1  |
| <input checked="" type="checkbox"/> | 2  | American Standard AccuLink AZone950                     | 450   | 90 | ● | ● | ● | ● | ● | 10 |
| <input checked="" type="checkbox"/> | 3  | Trane ComfortLink II Smart Control TZone 950            | 550   | 90 | ● | ● | ● | ● | ● | 10 |
|                                     | 4  | Allure Energy EverSense                                 | 400   | 89 | ● | ● | ● | ● | ● | 1  |
|                                     | 5  | Venstar ColorTouch Series T5900 ColorTouch Series T5800 | 225   | 88 | ● | ● | ● | ● | ● | 1  |
|                                     | 6  | Ecobee EB-STAT-02                                       | 300   | 84 | ● | ● | ● | ● | ● | 3  |
|                                     | 7  | Ecobee EB-SMART Si-01                                   | 175   | 83 | ● | ● | ● | ● | ● | 3  |
|                                     | 8  | LockState Connect LS-90i                                | 300   | 73 | ● | ● | ● | ● | ● | 1  |
|                                     | 9  | Nest Learning Thermostat                                | 250   | 69 | ● | ● | ● | ● | ● | 2  |
|                                     | 10 | Aprilaire Communicating Touchscreen 8800                | 300   | 68 | ● | ● | ● | ● | ● | 5  |
|                                     | 11 | Iris CT-101-L   | 100   | 64 | ○ | ● | ● | ● | ● | 1  |
|                                     | 12 | Emerson Sensi 1F86U-42WF                                | 160   | 59 | ○ | ● | ○ | ● | ● | 5  |
|                                     | 13 | Trane TZEMT400BB3NK                                     | 150   | 56 | ○ | ● | ○ | ● | ● | 1  |
|                                     | 14 | Motison CyberStat CY1201                                | 85    | 46 | ● | ● | ○ | ● | ● | 2  |

### B THERMOSTATS WITHOUT REMOTE ACCESS

|                                     |    |   |     |    |   |    |   |   |   |   |
|-------------------------------------|----|---|-----|----|---|----|---|---|---|---|
| <input checked="" type="checkbox"/> | 1  | Honeywell Prestige HD YTHX9321R         | 250 | 95 | ● | NA | ● | ● | ● | 5 |
| <input checked="" type="checkbox"/> | 2  | Lux TX9600TS Smart Temp ATX9600TS (Ace) | 70  | 75 | ● | NA | ● | ● | ● | 3 |
| <input checked="" type="checkbox"/> | 3  | Robert Shaw 9801i2                      | 125 | 74 | ● | NA | ● | ● | ● | 5 |
|                                     | 4  | Wiser EER56100                          | 240 | 73 | ● | NA | ● | ● | ● | 1 |
|                                     | 5  | Honeywell RTH7500D                      | 90  | 70 | ● | NA | ● | ● | ● | 1 |
|                                     | 6  | Honeywell Touchscreen RTH8500D          | 130 | 69 | ● | NA | ○ | ● | ● | 1 |
|                                     | 7  | Honeywell RTH6350D                      | 50  | 68 | ● | NA | ● | ● | ● | 1 |
|                                     | 8  | Lennox ComfortSense 7000 Series         | 230 | 67 | ● | NA | ● | ● | ● | 1 |
|                                     | 9  | Emerson Blue Easy Reader 1F95EZ-0671    | 100 | 67 | ○ | NA | ● | ● | ● | 5 |
|                                     | 10 | Lux ATX9000TS (Ace)                     | 65  | 66 | ● | NA | ● | ● | ● | 1 |
|                                     | 11 | Autani A12-01-0302-01 Energy Center     | 375 | 61 | ● | NA | ● | ● | ● | 5 |
|                                     | 12 | ICS TS830                               | 80  | 60 | ● | NA | ○ | ● | ● | 1 |
|                                     | 13 | Jackson Systems Wireless Comfort WCT-32 | 170 | 51 | ○ | NA | ● | ● | ● | 5 |
|                                     | 14 | Insteon 2441TH                          | 150 | 48 | ○ | NA | ● | ● | ● | 2 |
|                                     | 15 | ICM Controls SimpleComfort PRO SC5813   | 110 | 42 | ○ | NA | ○ | ● | ● | 5 |

## Guide to the Ratings

**Overall score** is based on programming ease, display clarity, and ease of remote access for connected thermostats. **Ease of use** denotes ease of setup and making adjustments and changes to setback programs, including overrides. **Display clarity** includes clarity and visibility of information. **Ease of remote access** denotes ease of setup for Wi-Fi or other types of remote access. **Price** is approximate retail.



# Keeping the current on

## 21 top generators protect you and your home

**STAYING WARM** and keeping your home's plumbing from freezing this winter could be a challenge if a storm shuts down the power. The best portable generators can run your furnace, fridge, and other essentials for as little as \$600. Larger, stationary models, which install permanently outside your home, add an electric oven and dryer, central A/C, and other comforts to that list. And some of both types make less noise and use less fuel than others, though you pay for those savings up front. Here are the details:

**The king of quiet.** Efficient inverter technology helps keep Honda's portable EU7000i at roughly the level of normal conversation, compared with the equivalent of a loud vacuum cleaner for most other models. Automotive-style fuel injection also helped this 5,500-watt machine sip gasoline, rather than guzzle it. But at \$4,000, it costs more up front than even the largest stationary generator we tested. A better value: Generac's RS7000E, a CR Best Buy for \$900, which makes far more noise but offers even more power.

**Power without pooping out.** All generators should be able to deliver the wattage they're claimed to provide, plus a little extra to handle temporary surge demands for refrigerators and other motorized items that cycle on and off. Generac's portable RS7000E and the stationary Kohler 8.5 RES-QS7, \$3,200, and Cummins 13GSBA-6722B/12B, \$4,300, were among the best at delivering that reserve power without bogging or stalling. Kipor promises its portable IG6000h can "easily power appliances with a power-draining startup." But this \$2,300 generator cut out under even moderate loads and proved relatively noisy, despite its inverter technology.

**Protection for sensitive stuff.** Smooth, steady power without dips and steps helps protect computers and other electronics and keeps refrigerator motors from overheating. Several stationary generators delivered that power in our tests. But though most portables handled our household loads capably, few matched the smoothness of the pricey, inverter-equipped Hondas in our Ratings.



### What's the safest way to use a chain saw?

Most saws have a brake that stops the chain if the bar kicks back toward the operator. But you'll still need protective chaps, gloves, steel-tipped boots, a helmet, face shield, and hearing protection. (That gear costs about \$200.) Start gas saws on the ground at least 10 feet from a fuel source. Use two hands when sawing. Don't lean into the cut or saw above shoulder level. And avoid cutting with the tip to help prevent kickback.

### Chain saws that clean up

Got trees? Add a chain saw to your list of emergency gear. Models below buzzed through 6x6-inch oak beams and include an array of safety features.

#### BEST FOR MOST NEEDS

**Stihl** MS 180 C-BE, \$230

**Echo** CS-352-16, \$270

The Stihl combines speedy sawing with low kickback and a chain you adjust without tools. Paying more for the Echo buys less weight and easier handling.

#### FOR HEAVIER WORK

**Echo** CS-590-20, \$400

**Husqvarna** 455 Rancher, \$420

**Husqvarna** 445, \$300 **CR Best Buy**

All three are rated for 300 hours of use. The Echo and Husqvarna 455 Rancher are fast but heavy and kicked back more than some in our tests. The Husqvarna 445 trades some speed for less weight.

#### FOR MORE OCCASIONAL USE

**Craftsman** 34190, \$150 **CR Best Buy**

**Worx** WG303.1, \$100 **CR Best Buy**

**Ego** CS1401, \$300 **CR Best Buy**

Choose the gas Craftsman if power outages are common. Top performance at a low price makes the Worx a standout among corded saws, and the Ego topped our tests of cordless saws.



Stihl MS 180 C-BE

### Be prepared for an emergency

- A whistle to attract help, dust masks, duct tape, a wrench or pliers, flashlights, and batteries.
- At least 1 gallon of water per person per day for three days, moist towelettes, plus garbage bags.
- Sleeping bags.
- A first-aid kit, hand sanitizer, pain medicine, tweezers, and sharp scissors.
- At least three days' worth of crackers, cereal, canned foods—and, yes, a manual can opener.



A2 Generac



C2 Kohler

## Overview

Top generators produce steady power under load. Among them, we focus below on models with specific strengths, value, or both.

✓ **CR Best Buy** These blend performance and value. All are recommended.

✓ **Recommended** These models stand out for the reasons below.

### POWER IN A PINCH

A1 Honda \$4,000

A2 Generac \$900 **CR Best Buy**

A7 Westinghouse \$1,000

A9 Predator \$600 **CR Best Buy**

These gasoline-powered portables can handle most items and cost much less to set up than larger models. **A1** is ultra-quiet and easy on fuel, but it's pricey. **A2** did almost as well and has a higher wattage rating, plus a dial control for starting. Also consider **A7** if less noise is critical, and the low-priced **A9** if you don't mind tougher maneuvering.

### FOR ADDED PEACE OF MIND

B2 Generac \$2,250 **CR Best Buy**

C2 Kohler \$3,700

C4 Briggs & Stratton \$4,300

Stationary generators turn themselves on during a blackout and run on propane or natural gas. These offer mobile control via your smart phone. **B2** is a bit noisier but less pricey than the top Kohler.

**C2** matched the Cummins, with more wattage for less money. Also consider **C4** for larger homes with higher power needs.



## How much fuel do I need for my generator?

Most portables use about 12 to 20 gallons of gasoline or four to eight 20-pound propane tanks per day. Stationary models can run 8 to 15 days for a 250-gallon propane tank.

## How much to install a stationary model?

Figure on \$2,000 to \$5,000, along with the required town or municipal permits. Your contractor should be familiar with proper setback distance, noise, and other local requirements.

# Ratings Generators

**Recommended models only** From 41 tested.

✓ CR Best Buy  
 ✓ Recommended

● Excellent  
 ● Very good  
 ● Good  
 ● Fair  
 ● Poor

| Rec. | Rank | Brand & model  | Price | Specs                  |                        |  | Overall score   | Test results   |               |       | Features    |              |             |                |
|------|------|--|-------|------------------------|------------------------|--|---|----------------|---------------|-------|-------------|--------------|-------------|----------------|
|      |      | Similar models, in small type, are comparable to tested model. All stationary models include transfer switch unless noted. |       | Claimed output (watts) | Weight with fuel (lb.) | Run time (hr.)  | <div><div></div><div>0100</div><div>P   F   G   V   G   E</div></div> | Power delivery | Power quality | Noise | Ease of use | Fuel shutoff | Oil shutoff | Electric start |

### A PORTABLE All are wheeled and run on gasoline. They require manual starting.

|   |    |                                   |         |       |     |       |    |                 |
|---|----|-----------------------------------|---------|-------|-----|-------|----|-----------------|
| ✓ | 1  | Honda EU7000is <sup>2</sup>       | \$4,000 | 5,500 | 292 | 8-16  | 79 | ● ● ● ● ● ● ● ● |
| ✓ | 2  | Generac RS7000E                   | 900     | 7,000 | 235 | 9-15  | 72 | ● ● ● ● ● ● ● ● |
| ✓ | 3  | Troy-Bilt XP 7000 30477           | 900     | 7,000 | 270 | 12-18 | 72 | ● ● ● ● ● ● ● ● |
| ✓ | 4  | Honda EM6500SXK2                  | 2,800   | 5,500 | 273 | 8-13  | 70 | ● ● ● ● ● ● ● ● |
| ✓ | 5  | Briggs & Stratton 30470           | 900     | 7,000 | 270 | 8-12  | 69 | ● ● ● ● ● ● ● ● |
| ✓ | 6  | Briggs & Stratton 30549           | 1,100   | 7,500 | 280 | 9-15  | 69 | ● ● ● ● ● ● ● ● |
| ✓ | 7  | Westinghouse WH7500E              | 1,000   | 7,500 | 237 | 8-12  | 69 | ● ● ● ● ● ● ● ● |
| ✓ | 8  | Honda EU6500is <sup>2</sup>       | 4,000   | 5,500 | 286 | 5-11  | 69 | ● ● ● ● ● ● ● ● |
| ✓ | 9  | Predator 68530 <sup>3</sup> 68525 | 600     | 7,000 | 243 | 8-13  | 68 | ● ● ● ● ● ● ● ● |
| ✓ | 10 | Generac GP5500 5939               | 700     | 5,500 | 212 | 8-14  | 67 | ● ● ● ● ● ● ● ● |
| ✓ | 11 | NorthStar 165603 <sup>3</sup>     | 1,500   | 6,600 | 252 | 8-12  | 66 | ● ● ● ● ● ● ● ● |
| ✓ | 12 | Champion 41537                    | 1,000   | 7,500 | 245 | 7-11  | 66 | ● ● ● ● ● ● ● ● |
| ✓ | 13 | Yamaha EF7200DE                   | 1,350   | 6,000 | 279 | 9-14  | 65 | ● ● ● ● ● ● ● ● |
| ✓ | 14 | Powermate PM0146500               | 850     | 6,500 | 228 | 9-13  | 65 | ● ● ● ● ● ● ● ● |

### B SMALL STATIONARY These install permanently and run on propane or natural gas. They start automatically.

|   |   |                                 |       |                    |    |                  |    |                 |
|---|---|---------------------------------|-------|--------------------|----|------------------|----|-----------------|
| ✓ | 1 | Kohler 8.5 RES-QS7 <sup>5</sup> | 3,200 | 7,000 <sup>6</sup> | NA | 224 <sup>7</sup> | 92 | ● ● ● ● ● ● ● ● |
| ✓ | 2 | Generac 6237 6245               | 2,250 | 7,000 <sup>6</sup> | NA | 336 <sup>7</sup> | 91 | ● ● ● ● ● ● ● ● |
| ✓ | 3 | Generac CorePower 5837          | 1,800 | 6,000 <sup>6</sup> | NA | 296 <sup>7</sup> | 77 | ● ● ● ● ● ● ● ● |

### C LARGE STATIONARY These install and run like smaller models but can handle more needs.

|   |   |                                    |       |                     |    |                  |    |                 |
|---|---|------------------------------------|-------|---------------------|----|------------------|----|-----------------|
| ✓ | 1 | Cummins 13GSBA-6722B               | 4,300 | 11,040 <sup>6</sup> | NA | 179 <sup>7</sup> | 93 | ● ● ● ● ● ● ● ● |
| ✓ | 2 | Kohler 14RESAL 14RESA, 14RESAL-200 | 3,700 | 12,000 <sup>6</sup> | NA | 182 <sup>7</sup> | 93 | ● ● ● ● ● ● ● ● |
| ✓ | 3 | Generac 6241 6247                  | 3,500 | 13,000 <sup>6</sup> | NA | 178 <sup>7</sup> | 91 | ● ● ● ● ● ● ● ● |
| ✓ | 4 | Briggs & Stratton 40401            | 4,300 | 13,600 <sup>6</sup> | NA | 175 <sup>7</sup> | 86 | ● ● ● ● ● ● ● ● |

<sup>1</sup> The average we measured over various loads. <sup>2</sup> Inverter model. <sup>3</sup> Price includes optional wheel kit. <sup>4</sup> Has feature but requires optional battery, about \$50. <sup>5</sup> Lacks a transfer switch. <sup>6</sup> Claimed output is with natural gas; output with propane is 1,000 to 2,000 watts higher (as tested). <sup>7</sup> With 250-gallon liquid-propane tank; runs indefinitely with natural gas. NA—not applicable; stationary unit.

## Guide to the Ratings

**Overall score** is based on power delivery, power quality, run time, noise, and ease of use. Scores for previously tested models may have changed because of changes in methodology. **Claimed output** is maximum wattage for continuous operation, as per manufacturer. **Weight with fuel** is the nearest pound (natural-gas models are fueled externally). **Run time** is average over various loads on a full tank of gasoline or diesel fuel, a 20-pound propane tank, or a 250-gallon propane tank for stationary models. **Power delivery** is wattage delivered and ability to meet surge-watt demands. **Power quality** denotes smoothness with consistent voltage. **Noise** is at 23 and 50 feet from the generator. **Ease of use** is starting, transport for portables, low-oil and fuel shutoff, and other features. **Price** is approximate retail.

## SHOPPING TIPS FOR GENERATORS

### Decide on portable or stationary

In addition to offering more power, stationary generators start automatically when the power goes out. And because they run on propane or natural gas, they save you the hassle and safety risks of storing many gallons of gasoline.

### Look for smart features

Portables with electric start save you the effort of pulling on a starter cord. Most automatically shut down if engine oil gets low. A fuel shutoff helps you drain gasoline from the carburetor and lines.

### Plan for safe setup

A transfer switch (about \$500 to \$900 installed) safely connects a portable generator to your home's wiring. Avoid carbon-monoxide risks by running portables at least 15 feet from the house, away from open windows and doors.



# Lab Tests

## Blu-ray players evolve

The new generation of Blu-ray players is giving streaming media devices a run for their money. Not only can they play discs of all kinds, but they also have many of the same streaming capabilities as Apple TV, Chromecast, and Roku.

**Streaming services.** Most new Blu-ray players stream video from Amazon Instant Video, Hulu Plus, Netflix, Vudu, YouTube, and a raft of other services, and some models can connect with social media apps (such as Facebook and Twitter) and music services (Pandora and Rhapsody) as well. Want more? Many players can download apps from online stores, and a small but growing number have built-in Web browsers.

Colorful home screens and interfaces, reminiscent of a tablet's icons, are easy to navigate. To aid in entering URLs and searching for titles, some new models support a QWERTY keyboard and mouse, and some remotes have one-touch buttons for services such as Netflix.

**Easy sharing.** Wi-Fi is almost universal (although we recommend a wired Ethernet connection for the fastest, most stable streaming experience). DLNA-equipped players can stream music, video, and photos from a compatible computer, smart phone, or tablet on the same network to your TV. Screen mirroring lets you watch content from your mobile device's display on a big-screen TV.

Blu-ray discs also offer something no streaming player can match: the best HD picture quality you can get at home. The 1080p video on Blu-ray discs is compressed far less than streaming video, so it has more picture data and sharper detail. Also, with a disc there's no buffering, and picture quality won't vary depending on broadband speed. Sound quality from Blu-ray discs is better, too, thanks to high-resolution, lossless audio.

Here are three new players that are loaded—with 3D capability, built-in Wi-Fi, a host of streaming services, a Web browser, and screen mirroring from a compatible mobile device. They all did an excellent job upscaling 1080p video to 4K, a plus if your UHD TV doesn't do the job as well.



### 1. Sony BDP-S6200, \$180

Responsive and fast, this Sony comes with a slew of apps. It has a remote-control app that lets you use your phone or tablet to enter text, passwords, and so on, which is easier than using a standard remote. It can play SACD discs, a plus for audiophiles.

### 3. Panasonic DMP-BDT360, \$140

In addition to all of the capabilities shared with the other players, as described above, the Panasonic is one of the few players that accepts memory cards. That makes it easy to play your content on a TV.

### 2. Samsung BD-H6500, \$175

The Samsung stands out for its intuitive interface and fast response to remote-control entries. It supports a USB keyboard and mouse, handy for the browser and global search function. Wi-Fi direct enables the player to connect with other devices without going through a network.

# Best and worst irons

**Any of the 40 steam irons tested** will remove wrinkles, eventually. The best produced a lot more steam and have soleplates that glide more easily, making the job faster and easier. But even an excellent iron may feel clunky in your hand, so hold it before you buy. It will be heavier when filled with water.

**Best irons.** All offer lots of steam, and most have a "ready" light that lets you know when the iron reaches set temperature. The **1 Rowenta**, \$140, offers superb ironing and has a nicely placed LED display and a sensor that stops the steam when the iron isn't in motion. But it's heavier than most. The **10 Rowenta**, \$125, is also heavy but offers plenty of steam, though the ironing wasn't quite as impressive. Heaviest of all is the **3 Kenmore**, \$75. It has a nice long cord and performs almost as well as the top-rated Rowenta for less. The **2 Panasonic**, \$130, also has a long cord and superb ironing, but this iron is big.

The **4 T-Fal**, \$45, a CR Best Buy, and the **5 Singer**, \$60, are among the lightest irons we tested. Small hands may find the T-Fal comfortable to use, and the long cord comes in handy. The **9 Black & Decker**, \$45, was even lighter. It has a retractable cord, which is handy, though it can make the iron feel unbalanced. It lacks a ready light. The **7 Hamilton Beach**, \$50, also has a retractable cord and was comfortable for people with large hands. The **6 Rowenta**, \$50, is a CR Best Buy. It doesn't have all of the extras the top-rated Rowenta has, but it does have steam surge and vertical steam, as does the **8 Rowenta**, \$90.

**Steam-ironing systems.** These usually have an iron with a long cord that sits atop a water tank. The tank steadily produces so much steam that you can zip through a large basket of dress shirts—most systems emit about an hour's worth of steam. They're also ideal for ironing silk and other delicates and quilts, but

the systems eat up a lot more space than an iron and take longer to heat, so they're not as convenient for quick jobs. The Reliable IronMaven J420, \$300, is tops of the three we tested. The all-temp steam provides steam at lower temp settings, but that iron lacks steam surge and vertical steam. The \$150 Rowenta DG-5030 has vertical steam and performed

almost as well but took longer to heat up, and the cord doesn't have a swivel attachment.

**Irons to skip.** These emitted little steam, so they took longer to get the job done: the Sunbeam GCSBCL-212, \$30; the Westinghouse Turbo Dry Steam SA46910A, \$70; and the Sunbeam Classic GCSBCL-317, \$25. The last two were also worse at ironing fabrics.



A1 Rowenta

## Ratings

Top models only From 40 tested.

- Excellent
  - Very good
  - Good
  - Fair
  - Poor
- ☒ CR Best Buy  
☒ Recommended

| Rec. Rank | Brand & model | Price | Overall score              | Test results   | Features                     |
|-----------|---------------|-------|----------------------------|--|------------------------------|
|           |               |       | 0 100<br>P   F   G   V   E | Steaming rate<br>Ironing fabric<br>Ease of use<br>Weight (lb.) | Soleplate<br>Digital display |

**CONVENTIONAL STEAM IRONS** All have steam surge, vertical steam, and automatic shutoff.

|                                     |    |  |       |    |           |     |                 |   |
|-------------------------------------|----|--|-------|----|-----------|-----|-----------------|---|
| <input checked="" type="checkbox"/> | 1  | Rowenta Steamforce DW9280  | \$140 | 95 | ● ● ● ● ● | 3.7 | stainless steel |   |
| <input checked="" type="checkbox"/> | 2  | Panasonic NI-W950A   | 130   | 93 | ● ● ● ● ● | 3.3 | alumite         |   |
| <input checked="" type="checkbox"/> | 3  | Kenmore 80598  | 75    | 88 | ● ● ● ● ● | 4.1 | stainless steel | ● |
| <input checked="" type="checkbox"/> | 4  | T-Fal FV4495 Ultraglisse   | 45    | 88 | ● ● ● ● ● | 2.9 | ceramic         |   |
| <input checked="" type="checkbox"/> | 5  | Singer Expert Finish EF  | 60    | 86 | ● ● ● ● ● | 2.8 | stainless steel | ● |
| <input checked="" type="checkbox"/> | 6  | Rowenta Effective Comfort DW2070   | 50    | 85 | ● ● ● ● ● | 3.0 | stainless steel |   |
|                                     | 7  | Hamilton Beach Chrome Electronic 14955   | 50    | 83 | ● ● ● ● ● | 3.1 | stainless steel |   |
|                                     | 8  | Rowenta Pro Master DW8080  | 90    | 83 | ● ● ● ● ● | 3.5 | stainless steel |   |
|                                     | 9  | Black & Decker Xpress Steam Cord Reel ICR07X Black & Decker Xpress Steam IRO8X | 45    | 83 | ● ● ● ● ● | 2.4 | stainless steel |   |
|                                     | 10 | Rowenta Steamium DW9080  | 125   | 81 | ● ● ● ● ● | 3.8 | platinum        |   |

## Ironing tips and tricks

Fighting wrinkles actually starts in your dryer. Cramming too much in it can worsen wrinkling, as can leaving items in the machine long after the cycle is over. Here's what to do:

**Toss it back in.** If things do sit too long in the dryer, add a damp towel and run the dryer for a few minutes to loosen the creases.

**Put it in the fridge.** If something is badly wrinkled and you don't have time to iron it, roll the item in a damp towel and put it in a plastic bag in the refrigerator until you're ready to iron.

**Iron blends at lower temp.** If an item is made of more than one type of fabric, use the cooler fabric setting: polyester, for cotton-poly blends, for example.

**Iron linen twice.** For crisp-looking linen, first press it on the high setting with steam; then, with the steam setting off, go over it with a dry iron.

**Be careful with raised patterns.** Items with eyelets, embroidery, or other raised patterns should be ironed facedown, with a towel underneath, so the pattern isn't flattened or warped.

tern isn't flattened or warped.

**Knits need special attention.** Wool items cannot usually be ironed with steam. Press acrylic knits instead of moving the iron in circles or straight lines, which could stretch the fabric.

**Don't iron velvet.** Use the burst of steam or the vertical steam function to smooth out wrinkles without flattening velvet's lush pile.

# Our best-scoring camera ever

**ONE OF THE NEW CAMERAS** in our Ratings has the highest score of any we have tested, and it's not an SLR that costs thousands of dollars. It's an \$800 point-and-shoot, the Canon PowerShot G1 X Mark II. The 13-megapixel camera is the first to earn an Excellent score for overall image quality as well as flash photos and video. That's an achievement unmatched by any SLR or mirrorless SLR-like.

That doesn't mean the G1 X Mark II is the perfect choice for all shooting situations. There are times you might want the versatility of an SLR or mirrorless model that can take interchangeable lenses, the easy portability of a superslim camera you can slip in a pocket, or the durability of a rugged, waterproof camera.

And though the G1 X Mark II is a winner overall, we do have a few quibbles with it. Unlike some in its class, it lacks a viewfinder, so you have to compose shots on its LCD (which at least is excellent). Also, its zoom lens isn't very long: a 5x optical, from 24mm to 120mm.

If you want a longer zoom and don't mind a little more size and weight, consider the Sony Cyber-shot DSC-RX10, \$1,000, which has an 8.3x zoom lens. It takes very good photos and excellent video and has an excellent electronic viewfinder—invaluable when sun glare washes out the LCD. The RX10 also has a constant f/2.8 aperture throughout the range of the zoom, extremely rare on a point-and-shoot. That lets you create more professional-looking shots, particularly in low light.

The Ratings lists 16 models from our tests of 24 advanced point-and-shoots.

## Three other standouts:

- The Panasonic Lumix DMC-LF1, \$350, a CR Best Buy, takes very good quality stills and video. It's lightweight and slim.
- The Olympus Stylus 1, \$650, takes very good photos and has a long zoom, 10.7x. Like the Sony Cyber-shot DSC-RX10, it has a constant f/2.8 aperture and an excellent viewfinder.
- The Pentax MX-1, \$250, a CR Best Buy, costs less than many basic cameras yet gives you the flexibility of manual controls. It excels at day-light shots and takes very good flash photos and video. Overall image quality is decent.



## Ratings Point-and-shoot cameras

Selected models only From 24 tested.

☒ CR Best Buy  
☒ Recommended

● Excellent ● Very good ○ Good ● Fair ● Poor

| Rec.                                | Rank | Brand & model                | Price  | Overall score             | Test results  |              |               |             |            | Specifications |              |              |
|-------------------------------------|------|------------------------------|--------|---------------------------|---------------|--------------|---------------|-------------|------------|----------------|--------------|--------------|
|                                     |      |                              |        |                           | Image quality | Flash photos | Video quality | LCD quality | Viewfinder | Megapixels     | Weight (oz.) | Optical zoom |
|                                     |      |                              |        | 0100<br>P   F   G   V   E |               |              |               |             |            |                |              |              |
| <input checked="" type="checkbox"/> | 1    | Canon PowerShot G1 X Mark II | \$ 800 | 78                        | ●             | ●            | ●             | ●           | NA         | 13             | 20           | 5x           |
| <input checked="" type="checkbox"/> | 2    | Sony Cyber-shot DSC-RX10     | 1,000  | 72                        | ●             | ●            | ●             | ●           | ●          | 20             | 30           | 8.3x         |
| <input checked="" type="checkbox"/> | 3    | Nikon Coolpix A              | 1,100  | 71                        | ●             | ●            | ●             | ●           | NA         | 16             | 12           | 1x           |
| <input checked="" type="checkbox"/> | 4    | Sony Cyber-shot DSC-RX100M2  | 650    | 71                        | ●             | ●            | ●             | ●           | NA         | 20             | 10           | 3.6x         |
| <input checked="" type="checkbox"/> | 5    | Fujifilm X100S               | 1,300  | 69                        | ●             | ●            | ●             | ●           | ●          | 16             | 17           | 1x           |
| <input checked="" type="checkbox"/> | 6    | Leica C (Typ 112)            | 700    | 69                        | ●             | ●            | ●             | ●           | ●          | 12             | 7            | 7.1x         |
| <input checked="" type="checkbox"/> | 7    | Ricoh GR                     | 700    | 69                        | ●             | ○            | ○             | ●           | NA         | 16             | 9            | 1x           |
| <input checked="" type="checkbox"/> | 8    | Panasonic Lumix DMC-LF1      | 350    | 68                        | ●             | ●            | ●             | ●           | ●          | 12             | 7            | 7.1x         |
| <input checked="" type="checkbox"/> | 9    | Canon PowerShot G16          | 500    | 68                        | ●             | ●            | ●             | ●           | ○          | 12             | 14           | 5x           |
| <input checked="" type="checkbox"/> | 10   | Panasonic Lumix DMC-LX7      | 400    | 66                        | ●             | ●            | ●             | ●           | NA         | 10             | 11           | 3.8x         |
| <input checked="" type="checkbox"/> | 11   | Olympus Stylus 1             | 650    | 66                        | ●             | ○            | ○             | ●           | ●          | 12             | 15           | 10.7x        |
| <input checked="" type="checkbox"/> | 12   | Nikon Coolpix P7800          | 550    | 65                        | ●             | ●            | ●             | ●           | ●          | 12             | 15           | 7.1x         |
| <input checked="" type="checkbox"/> | 13   | Fujifilm X20                 | 500    | 65                        | ●             | ●            | ○             | ●           | ●          | 12             | 14           | 4x           |
| <input checked="" type="checkbox"/> | 14   | Pentax MX-1                  | 250    | 65                        | ○             | ●            | ●             | ●           | NA         | 12             | 15           | 4x           |
| <input checked="" type="checkbox"/> | 15   | Nikon Coolpix P340           | 350    | 64                        | ●             | ●            | ●             | ●           | NA         | 12             | 7            | 5x           |
| <input checked="" type="checkbox"/> | 16   | Panasonic Lumix DMC-ZS40     | 400    | 64                        | ●             | ○            | ●             | ●           | ●          | 18             | 9            | 30x          |



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\*Between 04/01/13 and 04/30/13, the average estimated savings off MSRP presented to program users by participating based on user new vehicle configurations was \$2,791.

# Cars

## Navigating the electronics maze

CDs are so '00' ... and other findings from our new owner survey



**MEDIA CENTER** Today's cars offer multiple ways to listen to music or get directions, and drivers are using them all.

**IN-CAR ELECTRONICS** are changing the way we drive. GPS navigation, wireless Bluetooth capability, and an array of audio sources and inputs are commonly available even in today's least-expensive cars. The smart phone, which has become a must-have accessory for many drivers, is being increasingly integrated into vehicles' infotainment systems. And if your current car doesn't let you perform many functions simply by using your voice, your next one probably will.

But how are drivers coping with that rapid change? What features are hot, and what's not? And how easy are the systems to learn? A new national survey, conducted by the Consumer Reports National Research Center, shows that those features are largely well-received. Even people who don't initially intend on buying them generally end up using them just as much as those who seek them out. Drivers are also taking advantage of all of those new audio options while, yes, leaving the CDs at home.

# 88%

of respondents who have voice controls for their phone, audio, and navigation systems use them frequently.





# 59%

frequently listen to music through a connected smart phone. Only 26 percent listen to CDs.

## SPEAKING OUT

If you experienced the early voice-control systems in cars, you may not have been impressed. You usually needed to remember strict and complicated command structures, often had to repeat what you said several times, and could end up just short of having a heated argument with the system.

The best of today's systems are much improved. They respond quickly and accurately to commands, and they allow you to use natural speech instead of requiring specific commands. The end result is that voice-control systems can make it easier and safer to perform many functions—whether making phone calls, getting directions, or choosing tunes for the ride—while keeping your eyes focused on the road ahead.

Our survey shows that most respondents found voice controls easy to use and were very satisfied overall. About two-thirds of those with voice-controlled phone or audio systems said they use them regularly, and more than half said they were comfortable using them even within the first week. Not surprisingly, younger drivers adapted to using voice controls faster than older drivers on average.

## TUNES TO GO

The days of listening only to AM, FM, or CDs are long gone. Drivers can now choose from a wide variety of audio sources, with almost

limitless music choices. Just about every new car allows you to connect a smart phone or portable music player to the audio system by plugging into a USB or mini-jack port or connecting wirelessly through Bluetooth. You can listen to your own audio library or stream Internet radio stations such as Pandora or Slacker.

Many vehicles also come equipped to receive SiriusXM satellite radio or HD radio, which allows you to receive digital signals from local radio stations. Or you can listen to music, podcasts, and more stored on a memory card or flash drive.

Our survey found that drivers are using all of those options. FM radio is still the most popular, with 71 percent of respondents reporting they frequently tune in while driving. The next most popular alternative is the smart phone, with 59 percent frequently using it to listen to audio files. Thirty-four percent also listen to music on an MP3 player.

Almost half of the respondents frequently tune in to satellite radio. But because many new vehicles include a free trial subscription, many in the survey are probably not paying the usual \$120 to \$200 annual fee.

Thirty percent said they listen to Internet radio stations through their smart phone. Those stations provide free access, but hours of streaming can eat into your phone's data

allowance. To avoid unwanted surprises on your phone bill, be sure to regularly check your data usage.

Survey respondents had high praise for HD Radio, which came as a bit of a surprise to our auto testers. The vast majority of those who use it said they found it better than a regular FM radio signal in terms of sound quality and signal reception. That doesn't reflect our experiences while driving test cars, with our staff often reporting unreliable HD Radio signals that frequently come and go, resulting in echoes and other annoying effects, even in suburbs near New York City.

What's not going along for the ride is the CD, which only 26 percent of our respondents still frequently listen to in their cars. CD purists may argue that you give up audio quality by using a phone or portable music player. But when measuring sound quality in a Mercedes-Benz S550 with a high-end audio system, CONSUMER REPORTS audio engineers found no noticeable difference between a CD and music stored on an iPod Touch and recorded at 256 kilobits per second, which is typical of online music stores such as iTunes. We also found no difference in sound quality between connecting the device with a cable or via Bluetooth. The difference was more noticeable at 128 Kbps, but many listeners might not even notice.

# 38%

frequently use their phone for navigation while driving, compared with 26 percent who use a stand-alone portable GPS device.

## Who we heard from

Conducted by the Consumer Reports National Research Center, the survey reached out to a national sampling of drivers age 18 and up who own smart phones and have a 2012- to 2015-model-year vehicle equipped with at least two of the following: Bluetooth connectivity, a factory navigation system, and voice controls for navigation, audio, or telephone functions.







## NAVIGATING THE OPTIONS

Drivers can get turn-by-turn directions from several sources, including built-in factory navigation systems; telematics systems, such as GM's OnStar or Hyundai's Blue Link; portable GPS devices; and smart phones equipped with Google Maps or other navigation apps.

Built-in systems usually have larger screens, which make them easier to see and use in the car. And they don't require a separate power cord or windshield mount that adds to the clutter. Those may be among the reasons built-in systems are used more often than the other three among those who have them. Among survey respondents whose cars are equipped with such a system, 56 percent said they use it frequently. The second choice for navigation is a smart phone (40 percent), followed by portable devices (28) and a telematics system (21).

Telematics systems, which usually require a \$200 annual subscription fee, are showing up in more cars. In addition to navigation, they provide emergency crash alerts, which aid first responders in providing help, a tracking service in case of theft, and even emergency door unlocking if you lock your key in the car. For directions, the driver can press a button to speak with a live operator, who then sends them to the car.

Anyway you cut it, smart phones have become more popular than portable GPS devices as a navigation source of choice. Compared with a built-in system, finding an address or point of interest is often easier or quicker with a phone. Also, many built-in systems don't allow users to key in an address on the fly. That is intended to increase safety, but it may be encouraging drivers to

# 70%

of respondents bought features they didn't intend to; 39% of them felt pressured by the dealer's staff.

reach for a portable device instead. In addition, automakers can charge hundreds of dollars for map updates. Smart-phone apps usually download data—constantly updated free—from the Internet.

## CALLING WIRELESSLY

Using a handheld phone while driving can increase driver distraction. That's why 13 states and the District of Columbia ban such phone use while driving.

Most new cars are equipped with Bluetooth technology, which lets a driver wirelessly link his cell phone to the car. Using a built-in microphone and the vehicle's audio system, the driver can then make and receive calls without taking his hands off the steering wheel.

Half of our survey respondents say they frequently use Bluetooth for calls while behind the wheel. The bad news is that 80 percent of our respondents with Bluetooth say they still at least occasionally pick up their phone to make or answer calls while driving. Younger drivers are the worst offenders, with 63 percent of those ages 18 to 29 saying they frequently pick up the phone while driving, compared with about 50 percent of all age groups who say they frequently use Bluetooth.

## Safety vs. function

Consumers Union, the policy and advocacy arm of Consumer Reports, says there needs to be a balance between letting drivers use in-car electronics in a safe manner and limiting tasks that are too distracting. We support the National Highway Traffic Safety Administration's current work aimed at reducing driver distractions caused by confusing vehicle controls and infotainment systems. We also support the agency's efforts to address the distractions caused from using cell phones in cars. Though NHTSA is focused on making its safety guidelines voluntary, we'd much prefer them to be mandatory.

We also support continued government research to determine how drivers use in-car technology, which can give us more insight into the risks involved and the possible solutions. And it's vital that NHTSA have adequate resources to determine how the industry is complying with distracted-driving guidelines.

## Compare before you commit

**In-car electronics is the fastest growing area in today's auto market. The systems can significantly enhance our driving experiences by providing more information and entertainment, and by making everything from our commutes to road trips more pleasant and efficient.**

Our survey makes it clear that drivers are using and quickly adapting to the features. But most respondents had to get them as part of an options package, which often included unwanted features as well. Do the math to make sure that the systems you want are worth

the total package cost.

Manufacturers are adapting as well, introducing new features each year and better integration. As systems improve and become easier to use, that will encourage wider use, less stress, and increased safety.

That said, we've found that many infotainment

and control systems are still initially too complicated and distracting to use, particularly Cadillac's Cue, Ford's MyFord Touch and MyLincoln Touch, and Honda's Honda Link systems.

When buying a car, it's important that you learn about the functions and capabilities of those

systems and get familiar with how to use the controls before you drive off the dealer's lot.

At delivery, most dealers will pair your phone and teach you how the car's system works. Insist on getting that instruction so that you can get up to speed quickly and get the most out of your vehicle.



Ford Mustang

A new Camry, F-150, and Mustang highlight the upcoming models

# Sneak peek 2015

It's big news when a top seller gets revamped. And for 2015 we'll see new versions of two top models: the Toyota Camry, which has been the bestselling passenger car in the U.S. year after year, and the Ford F-150, which has spearheaded America's overall best-selling model line for the past 32 years. In addition to those abundantly practical choices, a redesigned version of the iconic and sporty Ford Mustang will add a dash of spice to the 2015 offerings. And the trend toward ever-smaller SUVs continues with new models from Chevrolet, Honda, and Jeep.

## Ford Mustang | Fall 2014

Designed to evoke the style and spirit of its predecessors, the Mustang looks sleeker and more sophisticated while still paying homage to its roots. Slightly wider and lower than the outgoing model, the overall length, wheelbase, and proportions are about the same.

This reborn pony car retains its front-engine, rear-drive layout, and finally gets an independent rear suspension for better ride and handling. For the first time in more than two decades, a four-cylinder engine will be offered: a new 310-hp, 2.3-liter turbocharged four. Traditionalists will be relieved to hear that the 3.7-liter V6 and 5.0-liter V8 engines will still be available, producing 300 and 435 hp, respectively. And buyers will still have their choice of a coupe or convertible.

Inside, the cabin is more spacious and decidedly higher-rent, with better materials and more soft-touch surfaces. Ford spurs the technology quotient with push-button

start, the latest version of Sync (now with MyFord Touch), active cruise control, and blind-spot detection with cross-traffic alert.

**Bottom line.** The current 'Stang is our favorite muscle car, and the new one looks like it will take this model to a much more capable and sophisticated level.



## Toyota Camry | Fall 2014

Toyota is trying to inject some excitement into the solid but staid Camry with perhaps the most thorough midcycle freshening in memory. Every single body panel except the roof has been revised, interior appointments have been upgraded, and center

dashboard controls simplified. Toyota claims changes to the handling will make the Camry more fun to drive, while still retaining a comfortable ride. More insulation should help quell road noise. And new electronic safety features will be available.

A new XSE version provides the sportier handling of the SE along with more available features, such as heated leather seats and a sunroof. And the sporty new SE Hybrid version will get unique suspension tuning.

**Bottom line.** Recent redesigns, such as the Highlander's, indicate that Toyota might have found a good balance of ride and handling. We hope that carries over to the Camry.



## Ford F-150 | Late 2014

This radically re-engineered full-sized pickup will be going head-to-head against the reinvigorated Chevrolet Silverado, GMC Sierra, and Ram 1500. A thorough redesign features an all-aluminum body that trims 700 pounds to make it more



fuel efficient, and Ford has promised class-leading payload and towing capacities.

Buyers can choose one of four engines: a new 2.7-liter EcoBoost V6 (with fuel-saving start/stop technology), a 3.5-liter V6 with or without EcoBoost turbocharging, and a conventional 5.0-liter V8.

The new F-150 will offer several features never seen in pickup trucks, including a 360-degree-view camera system to ease parking, LED headlights, a remote tailgate release, and integrated ramps to make it easier to load lawn mowers, dirt bikes, and so on.

Safety features include lane-departure warning, adaptive cruise control, and blind-spot detection. And inside, the infotainment screen will feature truck apps, such as fuel economy and towing tips.

**Bottom line.** The F-150's new aluminum body seems to be a moon-shot effort to outdo its red-hot truck competition. Though it provides fuel economy, payload, and towing benefits, some people are concerned about potential repair problems down the road. Stay tuned.



### Lexus NX | Fall 2014

With its first compact luxury SUV, Lexus is coming late to the party. But it will offer something unique: a hybrid version. The NX 300h will use the same gas/electric powertrain that we've found to be refined, quiet, and powerful in the Lexus ES 300h and Toyota Camry Hybrid.

The nonhybrid NX 200t will use Lexus' first turbocharged engine, a 2.0-liter four-cylinder that Lexus says has been tuned for fast throttle response and a "sportier driving experience than some SUVs." Both powertrains will be available with front- or all-wheel drive.

The NX also gets comprehensive safety gear, with a head-up display, radar cruise control, and blind-spot and cross-traffic warnings. And inside, it is the first model to get Lexus' new Remote Touch Interface infotainment system.

**Bottom line.** We think this popular segment is ripe for a hybrid model. But the new Remote Touch Interface is still convoluted and distracting to use.



### Ford Edge | Winter 2015

For 2015, Ford's midsize SUV moves to a platform shared with the modern and compelling Fusion sedan, which we've found fun to drive, with impressive ride, handling, and interior space.

For the first time, an EcoBoost engine will come standard: either a 2.0-liter four-cylinder or a 2.7-liter V6. Buyers can also opt for a conventional 3.5-liter V6.

Advanced safety features include blind-spot monitors; a 180-degree forward camera; backup camera; radar-based rear cross-traffic alert; forward, side, and reverse parking sensors; and lane-keeping alert. Active park assist will automatically park the car in parallel or perpendicular spots. Among other inviting features are a hands-free liftgate, heated and cooled front seats, and a heated steering wheel.

**Bottom line.** The outgoing Edge never lived up to its promise and has always been a marginal performer in our tests, with low scores for fuel-economy, refinement, ride, and handling. It's reasonable to expect the new model can only get better.



### Jeep Renegade | Early 2015

Built in Italy by Jeep's parent, Fiat, the Renegade is meant to give the brand a nimble SUV with better on-road manners than any small Jeep in recent memory. Top-trim versions offer the tough looks and off-road hardware that Jeep enthusiasts want. And fuel-economy estimates are a reasonable 30 mpg on the highway.

Engines include a Fiat-designed 160-hp, 1.4-liter turbo four-cylinder or a domestic 184-hp, 2.4-liter four. Front- or all-wheel drive is available, including the "Jeep Active Drive Low," which has a low, "crawl" gear ratio for tough going.

Trim lines run from the humble base version to the off-road-ready Trailhawk, which gets a higher ride height; 17-inch all-terrain tires; and hill-descent control. Chrysler's user-friendly Uconnect touchscreen infotainment system is optional.

**Bottom line.** The Renegade's rugged, youthful looks and legitimate off-road ability may attract a lot of buyers, but its underpinnings have fallen flat in the Fiat 500L, which is based on the same platform.

## Cheat sheet

Here are all of the new and redesigned models for 2015 and early 2016, as well as those reaching the end of the road.

### Tesla Model X



### New

- Acura TLX
- Alfa Romeo 4C
- Audi Q3
- BMW X4
- Chevrolet Trax
- Honda HR-V
- Infiniti Q30
- Jeep Renegade
- Lincoln MKC
- Lexus NX
- Lexus RC Coupe
- Mercedes-Benz GLA
- Mini Cooper Four-door

- Ram ProMaster City
- Tesla Model X
- Volkswagen eGolf
- Volkswagen Phaeton

### Redesigned or freshened

- BMW X6
- Cadillac Escalade
- Chevrolet Suburban
- Chevrolet Tahoe
- Dodge Challenger
- Dodge Charger
- Ford Edge

- Ford F-150
- Ford Mustang
- GMC Yukon
- GMC Yukon XL
- Honda Fit
- Hyundai Sonata
- Kia Sedona
- Land Rover Discovery
- Mercedes-Benz C-Class
- Nissan Murano
- Smart ForTwo
- Subaru Legacy
- Subaru Outback
- Toyota Camry

- Volkswagen GTI
- Volkswagen Golf and SportWagen
- Volvo XC90

### Discontinued

- Acura TL
- Acura TSX
- BMW 1 Series
- Cadillac CTS-V
- Chrysler 200 Convertible
- Dodge Avenger
- Jeep Liberty





### Honda HR-V | Winter 2015

As small SUVs such as the Honda CR-V have grown in price and size, a market niche is developing for even-smaller subcompact models. That's where the HR-V fits in. It will compete with the likes of the Chevrolet Trax, Jeep Renegade, and Nissan Juke.

Based on Honda's space-efficient subcompact Fit hatchback, the HR-V will have the Fit's handy folding rear seats, facilitated by mounting the gas tank under the front seats.

Honda has been mum on details about U.S.-bound models, but the HR-V is already for sale in Japan, with a choice of a small-displacement four-cylinder engine or a hybrid powertrain.

**Bottom line.** Enlarging the Fit's clever packaging into an even more practical SUV makes a lot of sense. And we like the idea of a more efficient hybrid SUV using Honda's latest technology.



### Mercedes-Benz C-Class | Fall 2014

This redesigned luxury compact sedan looks like a baby version of Mercedes' top-of-the-line S-Class. It's a few inches longer and a little wider than the previous C-Class, yet it has worked off a couple hundred pounds.

Both engines are substantially more powerful: A 241-hp, 2.0-liter turbocharged four-cylinder comes standard in the C300, and a 329-hp, 3.0-liter V6 motivates the C400. Each is coupled with Mercedes' 4Matic all-wheel drive and a reworked version of its very nice seven-speed automatic transmission.

For the first time, air suspension will be available, which keeps the car level during cornering and, according to Mercedes, reduces road noise.



Subaru  
Legacy



Subaru  
Outback

### FIRST DRIVES

## 2015 Subaru Legacy and Outback

**The Legacy sedan and Outback crossover wagon have carved out their own niches in today's competitive auto market. The Legacy has earned its keep as the only moderately priced, all-wheel-drive midsize sedan, which has made it a popular choice in colder climes. The Outback is a practical and more fuel-efficient alternative to a midsize SUV, and it has long been a hit with CONSUMER REPORTS readers.**

Both have been redesigned for 2015 to address the previous models' few shortcomings: a noisy and underpowered four-cylinder engine, outdated in-car electronics, and uninspiring driving dynamics. The mainstay 2.5-liter "boxer" flat-four engine has been retuned for better performance and fuel economy. Top-trim Outback and Legacy versions get a much stronger 3.6-liter flat-six engine. In addition, the continuously variable transmission is more refined, and sound insulation has been increased for a quieter cabin.

Both models now have a modern infotainment

system that can pair multiple phones and stream Internet radio. The Outback gets a power liftgate. And on the safety front, Subaru's EyeSight collision-avoidance system is available on more trim levels, along with blind-spot monitoring and rear cross-traffic alert.

**Comfy and quiet.** We recently spent a few days trying out early-production versions of a top-trim 3.6R Legacy sedan as well as four- and six-cylinder versions of the Outback from Subaru's press fleet.

The Legacy 3.6R rides as well as many luxury cars, easily shrugging off pavement faults and bumps. The Outback rides more firmly but is never harsh. Thanks to a stiffer body structure than in the previous models, both feel more substantial. And road, wind, and engine noise are well suppressed.

You won't confuse either vehicle for a sports car, but the steering has a reassuring heft, and even the Outback doesn't lean much in corners, despite its raised ride height.

The four-cylinder engine delivers adequate acceleration, and the throaty,

responsive six-cylinder is a treat. We expect fuel economy to be in the high 20s, but we'll verify that when we buy our own cars to test.

**Upgraded cabins.** The new interiors look more upscale, and higher-trim models now get memory seats and heated rear seats. Visibility is among the best in the class, and a backup camera is standard. Even our taller drivers found plenty of room and supportive seats. As before, the rear seat also has ample room. Subaru's new infotainment system is fairly intuitive.

Overall, we were very impressed by the new Legacy and Outback, but we'll know more when we finish testing our own vehicles.

### Tested vehicle

|                    |   |
|--------------------|---|
| <b>PRICE RANGE</b> | \$23,495 to \$35,985  |
| <b>DRIVETRAINS</b> | 175-hp, 2.5-liter four-cylinder and 256-hp, 3.6-liter six-cylinder engines; continuously variable transmission; all-wheel drive |

The S-Class' driver-safety aids, including autonomous braking and semiautonomous highway steering, are available. It also has a 360-degree camera system, which makes parking easier and is a feature we've grown fond of in other cars.

**Bottom line.** We like the old C-Class a lot,

and the new one looks better, although how user-friendly the infotainment system remains to be seen. Mercedes says the rear seats have notably more space, which is good news because the cramped rear was one of the major drawbacks of previous C-Class models.

# Hits and misses of 2014

How last year's models really measure up

Every year, consumers get inundated with a plethora of ads, commercials, and social buzz about models that are either brand-new to the market or have undergone a major makeover. All of this fuels the growing hype and expectations. But which ones really deliver when their rubber meets our test track and they get put through our 50-plus evaluations? And which, well, stall out? Here are five models that shone in our testing and thoroughly impressed our autos staff, and three that left us wondering, "Where's the beef?"

## Hits



### Mazda3

Redesigned for 2014, the Mazda3 has the magic formula of being fun to drive, fuel-efficient, and affordable. It delivers agile, even inspiring handling. And we got an excellent 33 mpg overall with the 2.0-liter engine and automatic transmission, and 32 with the manual. The 3 also offers advanced safety features on midlevel trims and has earned top-notch crash-test scores.



### Toyota Highlander

The revamped Highlander is like the comfy, refined family sedan of SUVs. This top-rated model provides a versatile, crowd-pleasing cabin; good driving manners; consistently good reliability; and frugal gas mileage of 20 mpg overall or 25 in the hybrid version.



### BMW M235i

The new M235i is a fresh, exhilarating coupe that's a joy to drive. It's taut and quick, and it has a satisfyingly sonorous exhaust note. Forged in the tradition of BMW's "Ultimate Driving Machine" mantra, it's now one of our top-rated cars.



### Acura MDX

The redesigned MDX is a well-rounded SUV that does many things well. It treats you to a hushed, versatile cabin, supple ride, and a new V6 engine that's quick, responsive, and refined. At 20 mpg overall, it's also among the most fuel-efficient SUVs in the class.



### Ford Fiesta ST

Yes, it's frugal, affordable, and easy to park, but this hot hatch is also exciting to drive. It won us over with its razor-sharp handling, near-telepathic steering, amazing braking, and invigorating exhaust bark. We also measured a great 29 mpg overall.

## Misses

### Mitsubishi Mirage

Despite its excellent 37 mpg overall, the new Mirage earned one of our lowest test scores in years, due to sluggish acceleration, a noisy, vibration-filled cabin, and clumsy handling, which result in an overall dismal driving experience.



### Subaru XV Crosstrek Hybrid

This halfhearted hybrid costs about \$3,000 more than the regular XV Crosstrek, but it got only 2 mpg better overall in our tests. That's not convincing.



### Lexus IS

Marketed as an upscale sports sedan, the redesigned IS 250 we tested is neither sporty nor luxurious. It has lackluster handling, a cramped cabin, and mediocre fuel economy.

# Heavy haulers

Mega-utility is the draw for the redesigned Chevrolet Suburban and Tahoe



**DRIVING THE CHEVROLET SUBURBAN** and Tahoe takes you back to a time when cars were cars and SUVs were, well, trucks. In this modern era of crossover wagons and car-based SUVs, these Chevy siblings are among the few SUVs that are still built on a truck-like, body-on-frame platform rather than the unibody design used for passenger cars.

Sure, car-based SUVs tend to ride more comfortably, handle better, and get better fuel economy. But the Suburban and Tahoe out-muscle those models with sheer utility. They offer true four-wheel drive with low-range capability, can tow 8,000 pounds or more, and, with their spacious interiors, can swallow a huge load of cargo, especially in the extra-long Suburban.

Twenty inches shorter, the Tahoe is essentially a sawed-off version of the Suburban. They are also almost twins of the GMC Yukon and longer Yukon XL. Either can hold up to seven, eight, or even nine people, depending on the configuration, plus haul a horse trailer. Moreover, the Suburban can handle that crowd along with a family vacation's worth of luggage. We measured a voluminous 62.5 cubic feet of cargo volume in the Suburban and 47.5 in the Tahoe. For

comparison, the cargo volume for the Toyota Highlander (see page 58) is 40.5, and it can tow up to 5,000 pounds.

The Suburban and Tahoe were redesigned for 2015, with plusher interiors, more modern electronic amenities, optional power-folding second- and third-row seats that

now fold down on the floor, and a host of advanced driver safety and visibility aids.

Both models also have a revised 5.3-liter V8 engine that improves fuel economy by 14 percent over previous models, delivering a best-in-class 16 mpg overall. The trade-off is that both SUVs feel a lot more sluggish than

## Ratings Large SUVs

In performance order.

● Excellent  
● Very good  
○ Good  
○ Fair  
● Poor

Recommended

| Rec. | Rank | Make & model                | Price as tested | In this issue | Overall road-test score     | Predicted reliability | Overall mpg |
|------|------|-----------------------------|-----------------|---------------|-----------------------------|-----------------------|-------------|
|      |      |                             |                 |               | 0 100<br>P   F   G   VG   E |                       |             |
|      | 1    | Mercedes-Benz GL350 BlueTec | \$73,020        |               | 82                          | ○                     | 20          |
|      | 2    | Chevrolet Suburban LTZ      | 69,790          | ●             | 74                          | new                   | 16          |
|      | 3    | Toyota Land Cruiser         | 67,707          |               | 68                          | NA                    | 14          |
| ✓    | 4    | Infiniti QX80               | 63,395          |               | 68                          | ●                     | 15          |
|      | 5    | Chevrolet Tahoe LT          | 60,100          | ●             | 67                          | new                   | 16          |
| ✓    | 6    | Toyota Sequoia Limited      | 54,005          |               | 60                          | ●                     | 15          |
|      | 7    | Nissan Armada Platinum      | 55,400          |               | 59                          | ●                     | 13          |

**Why some models are not recommended.** The Mercedes-Benz GL350 had poor emergency handling in our tests. The redesigned Chevrolet Suburban and Tahoe are too new for us to have reliability data. We have insufficient reliability data for the Toyota Land Cruiser. The reliability of the Nissan Armada has been much worse than average.



ROAD-TEST  
SCORE  
**74**

Chevrolet Suburban

ROAD-TEST  
SCORE  
**67**

Chevrolet Tahoe

before, although our Suburban, with the optional trailering package's 3.42 rear-axle ratio, felt a little less so than the Tahoe. The GMC Yukon Denali offers a larger 420-hp V8, but it delivers 2 mpg less than the 5.3-liter, according to EPA estimates, and it doesn't feel that much quicker.

Within this Chevy/GMC family, the Suburban LTZ is the most compelling package. That's partly because LTZ versions have GM's Magnetic Ride Control suspension, which improves the ride and handling significantly. But it's also because of the rare combination of attributes provided by the Suburban (and Yukon XL), including a cavernous passenger- and cargo-friendly interior. If you need that kind of utility, there just aren't that many other models to choose from.

The case is not as convincing for the Tahoe. A number of car-based SUVs provide similar functionality while being much more comfortable, responsive, fuel efficient, and less expensive. Some newer diesel-powered models can even match the Tahoe's towing capacity.

### Refined giants

Beyond their size, the first thing you notice about piloting these behemoths is how quiet they are, a lot like luxury cars.

Handling is decent, with minimal body lean, and the steering is relatively responsive and appropriately weighted. But with the base suspension our Tahoe LT had a tendency to hop and pitch in our emergency avoidance maneuver, which hurt its performance and reduced driver confidence. Despite its larger dimensions, the Suburban behaved better thanks to larger tires and the Magnetic Ride Control suspension, which anticipates body motions and adjusts the suspension to mitigate them. In our tests, that considerably reduced body lean, increased grip, and kept the Suburban much more settled and planted.

The ride was also much more steady and controlled in our Suburban. The Tahoe was stiffer and busy, constantly moving about.

Both tend to transmit bumps into the cabin, especially at low speeds.

Inside, the two-tone interior is beautifully finished and the front seats are comfortable and supportive. A power-tilt and telescoping steering wheel and power-adjustable pedals made it very easy to find a comfortable driving position.

These are tall vehicles, and it's difficult to see over the hood and rear window sill. A backup camera is standard, and higher trim versions have blind-spot monitoring.

The twin second-row captain's chairs in our vehicles were spacious, but they sit too low to the floor for adults. A three-person second-row bench is standard on LT versions. It's easy enough to access the third-row seat, but leg room in the Tahoe is very tight there; the Suburban provides more space.

Controls are simple to use, and the touch-screen menus are easy to navigate. Handy steering-wheel controls interface with a small screen in the instrument panel to control audio, phone, and trip info. Voice commands work painlessly for entering navigation addresses or dialing a contact. And five USB ports should keep everyone's mobile devices charged.

**Best version to get.** With either Chevy model, we suggest getting the LTZ trim for its Magnetic Ride Control suspension, which brings major dividends in ride and handling. Among the GMC models, only the top-of-the-line Denali comes with that suspension. That said, if you don't need the extra room of the Suburban, we suggest skipping the Tahoe and going with a Dodge Durango or Toyota Highlander.



### Tested vehicle

|                      |   |
|----------------------|---|
| <b>HIGHS</b>         | Utility (Suburban), quietness, fit and finish, easy-to-use infotainment system, cargo and towing capacity   |
| <b>LOWS</b>          | Stiff ride (Tahoe), high step-in height, feels underpowered, price, Suburban's long length (can make it difficult to park)                                    |
| <b>TRIM LINE</b>     | Suburban: LTZ; Tahoe: LT  |
| <b>DRIVETRAIN</b>    | 355-hp, 5.3-liter V8 engine; six-speed automatic transmission; four-wheel drive   |
| <b>MAJOR OPTIONS</b> | Suburban: Sunroof, navigation, rear entertainment, Max trailer tow package. Tahoe: Luxury package, rear bucket seats, sunroof, navigation, rear entertainment |
| <b>TESTED PRICE</b>  | Suburban: \$69,790; Tahoe: \$60,100   |

### More test findings

|                        |   |
|------------------------|---|
| <b>BRAKING</b>         | Relatively short stopping distances.  |
| <b>HEADLIGHTS</b>      | Very good visibility and intensity, but they can cause glare to oncoming drivers.   |
| <b>ACCESS</b>          | It's a tall climb in, but running boards help some. Weak door checks are annoying.  |
| <b>VISIBILITY</b>      | Large windows, but high hood and some thick pillars limit visibility in some directions. A backup camera is standard; blind-spot monitor is highly recommended. |
| <b>CABIN STORAGE</b>   | Plenty of options.  |
| <b>HEAD RESTRAINTS</b> | Center third-row seat doesn't provide adequate protection.  |
| <b>CHILD SEATS</b>     | Forward-facing seats fit best in the third row.   |

**KIDS' SPACE** Despite large dimensions, the third-row seat in the Tahoe is tiny. It's roomier in the Suburban.

# Toyota Highlander Hybrid

**LET'S PUT THE REDESIGNED** Highlander Hybrid into perspective. It's a midsize SUV that can seat up to seven people. It's refined and comfortable, loaded with creature comforts, and can tow 3,500 pounds. Yet it gets a very thrifty 25 mpg overall, which is the same as many small SUVs and midsize sedans. That's pretty impressive, and that's why it's now our top-rated midsize SUV.

The Hybrid takes the smooth, powerful V6 from the regular Highlander and adds a hybrid battery pack and three electric motors, increasing horsepower by 10, to 280. In place of the conventional six-speed automatic transmission, the Hybrid uses a continuously variable transmission, which is well-matched to the engine. That combo delivers 25 mpg overall, which is 25 percent better than the regular Highlander's 20 mpg but 2 less than in the previous Highlander Hybrid.

Power delivery is smooth. Transitions between electric power and the gas engine are seamless. And the Hybrid can usually propel itself on electric power up to about 35 mph.

That extra capability comes at a price, though. Toyota now offers the Hybrid only in the top-of-the-line Limited trims. So compared with the \$38,941 Highlander XLE we previously tested, the least expensive Hybrid version starts at \$48,555. In addition, advanced safety features, such as pre-collision and lane-departure warnings, are available only as part of a \$1,400 options package or as standard equipment on the \$51,045 Limited with Platinum Package.

Redesigned for 2014, the Highlander is a little larger than previous ones, with a skosh more room and a third row that can accommodate three passengers.

The new Highlander also handles better, with a steadier ride and reduced body lean in corners. When pushed to its handling limits, a well-tuned stability-control system kept things secure. Energy-saving regenerative brakes make the pedal a little touchy, but stopping distances were good.

The interior is plusher in the Limited version. The front seats are supportive and comfortable, drivers have plenty of room, and controls are simple. Visibility is good; a backup camera is standard.

We were impressed with Toyota's new infotainment system, which has simple menus that make it easy to select functions, as well as knobs for volume and tuning. It also has excellent voice controls and one of the most comprehensive Bluetooth streaming-audio interfaces we've seen.

**Best version to get.** As impressive as the Highlander Hybrid is, its steep price means that most buyers will find the standard Highlander to be a better deal. The money you save in gas each month won't make up for the Hybrid's higher car payment. Among regular Highlanders, the XLE trim is the best value, although high-tech safety features are available only on the Limited. If you don't need a third-row seat, the Jeep Grand Cherokee diesel could be a good alternative; it costs a little less and gets 24 mpg overall.

 **Recommended**



## Tested vehicle

|                      |   |
|----------------------|---|
| <b>HIGHS</b>         | Fuel economy, ride, quietness, interior accommodations                                  |
| <b>LOWS</b>          | Pricey, low rear seat   |
| <b>TRIM LINE</b>     | Hybrid Limited  |
| <b>DRIVETRAIN</b>    | 280-hp, 3.5-liter hybrid V6 engine; continuously variable transmission; all-wheel drive |
| <b>MAJOR OPTIONS</b> | None  |
| <b>TESTED PRICE</b>  | \$50,875  |

## More test findings

|                        |   |
|------------------------|---|
| <b>BRAKING</b>         | Short stopping distances.   |
| <b>HEADLIGHTS</b>      | Very good forward and side illumination.  |
| <b>ACCESS</b>          | Very easy in front, decent to the third-row seat.                               |
| <b>VISIBILITY</b>      | Very good.  |
| <b>CABIN STORAGE</b>   | Plenty of easy-access storage.  |
| <b>HEAD RESTRAINTS</b> | Third-row restraints must be raised when seat is in use.                        |
| <b>CHILD SEATS</b>     | Limited space in the third row makes it difficult to install rear-facing seats. |



## POWER PLAY

To save gas, the hybrid system can usually propel the vehicle on electric power alone up to about 35 mph.



**WELL CONNECTED** When paired with a smart phone, the easy-to-use infotainment system supports apps like Pandora and Yelp.



ROAD-TEST  
SCORE

77



## Ford C-Max Hybrid Energi

**WITH THE C-MAX HYBRID**, Ford is taking direct aim at the Toyota Prius and its extended family. At 37 mpg overall, the regular C-Max isn't as fuel efficient as the Prius models, nor is it as roomy. But it's much quieter and nicer to drive.

Similar to the Prius Plug-in model, the Energi is a plug-in hybrid that lets you spend more time driving on energy-saving, cost-cutting electricity than the regular C-Max. With its larger battery, the Energi lets you go about 18 miles on electric power before the conventional hybrid mode kicks in. That's about twice the range of the Prius Plug-in but only about half that of the Chevrolet Volt plug-in hybrid. However, the battery significantly cuts into the Energi's cargo space.

Other than that, the Energi drives almost identically to the regular C-Max Hybrid we tested last year. It's more than just efficient transportation; it's also fun to drive, with precise steering, responsive handling, and a luxurious ride. The cabin is quiet inside, making the C-Max feel solid and substantial. And its tall stance and low entry height makes access very easy.

We got the equivalent of 94 mpg overall with the Energi running solely on electricity, which is much better than the Prius Plug-in's 67. Once it reverts to normal hybrid mode, we measured the same 37 mpg as in the regular C-Max. Two handy buttons on the center console let you choose whether to run the car on electric power only or in the regular gas/electric hybrid mode. "EV Now" activates electric mode (as long as the battery is sufficiently charged); "EV Later" lets you save the electric-only miles for later use. That could be a big benefit if you expect to, say,

drive in congested city or rush-hour traffic, when EV mode will be most efficient.

The Energi takes 6 hours to charge on a normal 120-volt household outlet, or 2½ hours on a 240-volt electric-car charger, which is also a little more efficient. Either way, if your commute fits within the Energi's 18-mile electric range, you can drive for about 70 cents per day (based on the 11-cents-per-kWh national average) and skip the gas pump altogether.

When in electric mode, the C-Max's combined output from its engine and electric motor is 195 hp. Transitions from gas to electric power are smooth and nonintrusive, and the engine isn't really loud unless you're pushing it hard. Even then, active noise cancellation keeps it from being offensive. In hybrid mode, we found that the C-Max can drive up to about 35 mph before the gas engine starts. When you need full power, even in electric mode, the engine will come on at full throttle or highway speeds above about 70 mph.

Stopping distances were good. But we found that the regenerative braking, which helps recharge the battery, can make the brakes feel touchy.

Inside, the C-Max feels airy and spacious. Large windows give a great view of the road, though the driving position is a bit narrow. The rear seat is a bit flat and low but roomy enough. A downside in our C-Max is the MyFord Touch infotainment system, which is difficult to use while driving.

**Best version to get.** The C-Max Energi comes well-equipped. We would add the 302A package to get a backup camera and power liftgate.



### Tested vehicle

|                      |   |
|----------------------|---|
| <b>HIGHS</b>         | Maximizes use of electric mode, fuel economy, ride, handling, quietness, access                                       |
| <b>LOWS</b>          | Battery robs cargo space, complicated infotainment system, grabby brakes, expensive backup camera, reliability        |
| <b>TRIM LINE</b>     | Energi  |
| <b>DRIVETRAIN</b>    | 195-hp, 2.0-liter four-cylinder gas engine plus electric motor; continuously variable transmission; front-wheel drive |
| <b>MAJOR OPTIONS</b> | Premium audio, navigation   |
| <b>TESTED PRICE</b>  | \$34,940  |

### More test findings

|                        |   |
|------------------------|---|
| <b>BRAKING</b>         | Short stops on dry pavement.  |
| <b>HEADLIGHTS</b>      | Very good visibility from halogen low and high beams.   |
| <b>ACCESS</b>          | Extremely easy, with big doors and high seats.  |
| <b>VISIBILITY</b>      | Generally good, with big windows all around. But there are some blind spots.  |
| <b>CABIN STORAGE</b>   | Very little.  |
| <b>HEAD RESTRAINTS</b> | The rear-center restraint must be raised to provide any safety benefit.   |
| <b>CHILD SEATS</b>     | It may be necessary to remove the rear head restraint to allow some child-seat shells to rest flush against the seatback. Ford's MyKey system allows parents to set the top speed and radio volume for their teenage drivers. |



**INNER SPACE** Compared with the regular C-Max Hybrid, the Energi's larger battery takes up a lot of rear cargo room.



# Cars \ Comparison

✓ Recommended



| VERSION  | Chevrolet Suburban                                    | Chevrolet Tahoe                             | Toyota Highlander                          | Ford C-Max Hybrid                                     |
|--|---|---|--|---|
| <b>TRIM LINE</b>                                 | LTZ   | LT  | Hybrid Limited                             | Energi  |
| <b>PRICE: BASE/TESTED</b> <sup>1</sup>           | \$64,700/\$69,790                                     | \$53,000/\$60,100                           | \$49,790/\$50,875                          | \$32,950/\$34,940                                     |
| <b>DRIVETRAIN</b>                                |   |   |  |   |
| Engine   | 5.3-liter V8 (355 hp)                                 | 5.3-liter V8 (355 hp)                       | 3.5-liter V6 (280 hp) hybrid               | 2.0-liter 4-cyl. (195 hp) gas engine + electric motor |
| Transmission                                     | 6-speed automatic                                     | 6-speed automatic                           | CVT  | CVT   |
| Drive wheels                                     | 4WD   | 4WD   | AWD  | Front   |
| <b>TIRES TESTED</b>                              |   |   |  |   |
| Model & size                                     | Continental Cross Contact LX20, size P275/55R20 111 S | Goodyear Assurance CS, size P265/65R18 112T | Toyo A20 Open Country, size 245/55R19 103T | Michelin Energy Saver A/S, size P225/50R17 93V        |
| <b>RATINGS</b>                                   |   |   |  |   |
| <b>PERFORMANCE</b>                               |   |   |  |   |
| Acceleration                                     | ⊖   | ⊖   | ⊖  | ⊖   |
| 0 to 60 mph, sec.                                | 7.9   | 7.7   | 8.3  | 8.1   |
| 45 to 65 mph, sec.                               | 5.3   | 4.9   | 4.9  | 5.3   |
| Quarter-mile, sec.                               | 16.2  | 15.9  | 16.4                                       | 16.4  |
| Transmission                                     | ⊖   | ⊖   | ⊖  | ⊖   |
| Routine handling                                 | ⊖   | ⊖   | ○  | ⊖   |
| Emergency handling                               | ⊖   | ●   | ⊖  | ○   |
| Avoidance maneuver, speed, mph                   | 47.0  | 45.0  | 49.0                                       | 50.5  |
| Braking  | ○   | ⊖   | ○  | ⊖   |
| From 60 mph, dry/wet, ft.                        | 139/148   | 136/140                                     | 138/146                                    | 136/146   |
| Headlights                                       | ○   | ⊖   | ⊖  | ○   |
| <b>COMFORT AND CONVENIENCE</b>                   |   |   |  |   |
| Ride   | ⊖   | ○   | ⊖  | ⊖   |
| Noise  | ⊖   | ⊖   | ⊖  | ○   |
| Driving position                                 | ⊖   | ⊖   | ⊖  | ○   |
| Front-seat comfort                               | ⊖   | ⊖   | ⊖  | ⊖   |
| Rear/third-seat comfort                          | ⊖/○   | ⊖/●   | ⊖/●  | ⊖   |
| Access   | ⊖   | ⊖   | ⊖  | ⊖   |
| Controls and displays                            | ⊖   | ⊖   | ⊖  | ○   |
| Interior fit and finish                          | ⊖   | ⊖   | ⊖  | ○   |
| Cargo area/Trunk                                 | ⊖   | ⊖   | ○  | ●   |
| <b>PREDICTED RELIABILITY</b>                     | New   | New   | ⊖  | ●   |
| <b>FUEL</b>                                      |   |   |  |   |
| Overall mpg                                      | 16  | 16  | 25   | 94 MPGe <sup>2</sup> ; 37 mpg <sup>3</sup>            |
| City/highway mpg                                 | 10/23   | 10/23                                       | 18/32                                      | 87/98 MPGe <sup>2</sup> ; 36/38 mpg <sup>3</sup>      |
| Type   | regular   | regular                                     | regular                                    | electricity/regular                                   |
| Capacity, gal./Cruising range, miles             | 26/405  | 26/415                                      | 17.1/425                                   | 14 gal. + 7.6 kWh battery/535                         |
| Annual cost, 12K miles                           | \$2,940 @ \$3.80/gal.                                 | \$2,875 @ \$3.80/gal.                       | \$1,830 @ \$3.80/gal.                      | \$960 <sup>4</sup>                                    |
| <b>SAFETY</b>                                    |   |   |  |   |
| <b>CRASH TESTS</b>                               |   |   |  |   |
| IIHS moderate/small-overlap frontal              | NA/NA   | NA/NA                                       | Good/Acceptable                            | NA/NA   |
| IIHS side  | NA  | NA  | Good                                       | NA  |
| IIHS rear  | NA  | NA  | Good                                       | NA  |
| IIHS roof strength                               | NA  | NA  | Good                                       | NA  |
| NHTSA front, driver/passenger                    | ⊖/⊖   | ⊖/⊖   | ⊖/⊖  | ⊖/⊖   |
| NHTSA side, driver/rear                          | ⊖/⊖   | ⊖/⊖   | ⊖/⊖  | ⊖/⊖   |
| NHTSA rollover 2WD/4WD                           | ○/○   | ○/○   | ⊖/⊖  | ⊖/NA  |
| <b>AIR BAGS</b>                                  |   |   |  |   |
| Side, front/rear                                 | std./no   | std./no                                     | std./no                                    | std./no   |
| Head protection                                  | std. w/rollover                                       | std. w/rollover                             | std. w/rollover                            | standard  |
| <b>SPECIFICATIONS</b>                            |   |   |  |   |
| <b>DIMENSIONS AND WEIGHT</b>                     |   |   |  |   |
| Length/width/height, in.                         | 224/81/74   | 204/81/74                                   | 191/76/68                                  | 174/72/64   |
| Wheelbase, in.                                   | 130   | 116   | 110  | 104   |
| Turning circle, ft.                              | 45  | 41  | 40   | 41  |
| Curb weight, lb. (% front/rear)                  | 5,945 (52/48)   | 5,635 (52/48)                               | 4,925 (54/46)                              | 3,895 (55/45)   |
| Maximum load, lb.                                | 1,455   | 1,580                                       | 1,305                                      | 825   |
| Cargo volume, cu. ft./Luggage, suitcases+duffels | 62.5  | 47.5  | 40.5                                       | 1+1   |
| Towing capacity, lb.                             | 8,000   | 8,300                                       | 3,500                                      | NR  |
| <b>INTERIOR ROOM</b>                             |   |   |  |   |
| Front shoulder room, in.                         | 64.5  | 64.5  | 58.5                                       | 55.5  |
| Front leg room, in.                              | 43.5  | 43.5  | 42.0                                       | 42.0  |
| Front head room, in. <sup>5</sup>                | 4.5   | 4.5   | 4.0  | 7.0   |
| Rear shoulder room, in.                          | 64.5  | 64.5  | 58.5                                       | 53.0  |
| Rear leg room, in.                               | 30.0  | 30.0  | 31.5                                       | 28.5  |
| Rear head room, in. <sup>5</sup>                 | 5.0   | 4.5   | 5.5  | 5.0   |
| Third-row shoulder room, in.                     | 64.0  | 63.5  | 53   | NA  |
| Third-row leg room, in.                          | 27.0  | 27.0  | 27.5                                       | NA  |
| Third-row head room, in. <sup>5</sup>            | 4.0   | 0.0   | 1.0  | NA  |

<sup>1</sup> Based on sticker price at time of purchase. <sup>2</sup> Miles-per-gallon equivalent when operating in EV mode. <sup>3</sup> Miles per gallon when operating in normal hybrid mode. <sup>4</sup> Based on driving 18 miles in EV mode (36 percent electric and 64 percent gas) and \$0.11/kWh. <sup>5</sup> Above a person 5'9" tall.

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| Home insurance   | May 14, 40                         |  |
| Hospitals  | May 14, 44                         |  |
| Hotel taxes  | Sep 14, 7                          |  |
| <b>I</b>   |                                    |  |
| Ice cream and gelato   | Jun 14, 10                         |  |
| Individual retirement accounts (IRAs), rollover limits           | Oct 14, 9                          |  |
| Internet, Net neutrality rules                                   | May 14, 6; Aug 14, 6               |  |
| Irons  | Oct 14, 46                         |  |
| <b>J</b>   |                                    |  |
| Juicers  | Mar 14, 43                         |  |
| <b>K</b>   |                                    |  |
| Kitchen remodeling   | Jul 14, 24                         |  |
| <b>L</b>   |                                    |  |
| Laundry detergents   | Aug 14, 40                         |  |
| Lawn mowers & tractors   | May 14, 33                         |  |
| Leaf blowers   | Nov 13, 41                         |  |
| Lightbulbs   | Jan 14, 24                         |  |
| LED, Philips Slimstyle A19                                       | Jun 14, 42                         |  |
| Loans  |                                    |  |
| student, deceptive   | Sep 14, 6                          |  |
| Locators, personal   | Jun 14, 8                          |  |
| Locks, door  | Jun 14, 28                         |  |
| <b>M</b>   |                                    |  |
| Mattresses   | Mar 14, 20                         |  |
| Media & music players, streaming                                 | Dec 13, 42                         |  |
| Medical alert services   | Sep 14, 16                         |  |
| Microwave ovens  | Feb 14, 28                         |  |
| differences by price   | May 14, 50                         |  |
| Milk alternatives  | Sep 14, 8                          |  |
| <b>O</b>   |                                    |  |
| Online privacy & security  | Jul 14, 15                         |  |
| Organizers, closet   | Mar 14, 11                         |  |
| <b>P</b>   |                                    |  |
| Packing  | Dec 13, 9; Jul 14, 10              |  |
| Pain relievers, dangers of                                       | Sep 14, 19                         |  |
| Paints & stains  |                                    |  |
| exterior   | Jun 14, 24                         |  |
| interior   | Mar 14, 49                         |  |
| Pharmacies   | Mar 14, 24                         |  |
| Photography and photo sharing                                    | Jun 14, 32                         |  |
| Popcorn  | Mar 14, 8                          |  |
| <b>R</b>   |                                    |  |
| Ranges   | Feb 14, 24; Jul 14, 34             |  |
| pro-style  | Dec 13, 53                         |  |
| Recalled products, still on sale                                 | Oct 14, 14                         |  |
| Refrigerators  | Jan 14, 46; Jul 14, 40             |  |
| Repair vs. replacement   | Feb 14, 18                         |  |
| Restaurants  |                                    |  |
| complaints   | Aug 14, 11                         |  |
| fast food  | Aug 14, 15                         |  |
| Retirement planning  | Oct 14, 25                         |  |
| Reviews, online user   | May 14, 13                         |  |
| Robocalls  | Mar 14, 7                          |  |
| <b>S</b>   |                                    |  |
| Salad dressings  | Jul 14, 9                          |  |
| Seasonings, slow-cooker  | Jun 14, 9                          |  |
| Self-service   | Sep 14, 33                         |  |
| Selling unwanted items   | Sep 14, 23                         |  |
| Shopping   |                                    |  |
| choices, too many  | Mar 14, 16                         |  |
| grocery survey, women's  | Oct 14, 11                         |  |
| safety   | Dec 13, 59                         |  |
| Smart home systems   | Jun 14, 28                         |  |
| Smoke & carbon monoxide alarm, Nest Protect                      | May 14, 9                          |  |
| Snow blowers   | Feb 14, 47                         |  |
| Snow shovels   | Mar 14, 10                         |  |
| Soup, chicken noodle   | Jan 14, 11                         |  |
| Speakers, wireless   | Jan 14, 42; Jun 14, 41             |  |
| Store brands, pharmacy   | Jun 14, 7                          |  |
| Stores   |                                    |  |
| appliance  | Jul 14, 46                         |  |
| supermarkets   | May 14, 16; Jun 14, 5; Jul 14, 5   |  |
| Strollers  |                                    |  |
| Graco Ready2Grow Classic Connect LX, unsafe                      | Sep 14, 12                         |  |
| Truly Scrumptious Travel System, unsafe                          | Dec 13, 16                         |  |
| Summer safety  | Jun 14, 18                         |  |
| Sunscreens   | Jul 14, 21                         |  |
| Surgery, heart   | Aug 14, 32; Oct 14, 5              |  |
| Syrup, cancer risks  | May 14, 14                         |  |
| <b>T</b>   |                                    |  |
| Technical support  | Aug 14, 30                         |  |
| Telecommunications services                                      | May 14, 22                         |  |
| mergers  | Aug 14, 7                          |  |
| Telephone services   |                                    |  |
| cellular   | Jan 14, 26                         |  |
| cutting costs  | Jan 14, 36; Jul 14, 13             |  |
| Sprint Spark   | Jun 14, 42                         |  |
| Telephones   |                                    |  |
| cellular   |                                    |  |
| unlocking  | Mar 14, 6                          |  |
| cordless   | Dec 13, 56                         |  |
| smart  | Dec 13, 26; Jan 14, 26; Jan 14, 32 |  |
| Amazon Fire Phone  | Sep 14, 9; Oct 14, 10              |  |
| anti-distraction apps  | Mar 14, 53                         |  |
| mobile wallets   | Oct 14, 13                         |  |
| Samsung Galaxy S5  | May 14, 51                         |  |
| Television   | Mar 14, 28                         |  |
| mergers, Comcast-Time Warner                                     | Jul 14, 6                          |  |
| sports blockouts   | Feb 14, 6                          |  |
| Television sets  | Dec 13, 23; Mar 14, 35             |  |
| Ultra HD   | Jan 14, 42; Sep 14, 36             |  |
| Thermostats  | Oct 14, 42                         |  |
| 3D printers  | Dec 13, 54                         |  |
| Toasters & toaster ovens   | Nov 13, 42                         |  |
| Kups FB4C Convection   |                                    |  |
| Toaster Oven: Don't Buy  | Mar 14, 45                         |  |
| Toilet paper   | May 14, 7                          |  |
| Towels   |                                    |  |
| Chill-Its 6602 Evaporative Cooling                               | Jun 14, 8                          |  |
| paper  | Jan 14, 44                         |  |
| Toys, Buckyballs, recall settlement                              | Aug 14, 14                         |  |
| Travel abroad  | Aug 14, 12                         |  |
| Travel health  | Jul 14, 12                         |  |
| Treadmills, workstation  | Nov 13, 42                         |  |
| Trimmers, string   | May 14, 39                         |  |
| <b>U</b>   |                                    |  |
| Umbrella, GustBuster   | Nov 13, 11                         |  |
| <b>V</b>   |                                    |  |
| Vacation homes, renter protection                                | May 14, 10                         |  |
| Vacuum cleaners  | Nov 13, 44; Mar 14, 46             |  |
| hand and stick   | Jan 14, 43                         |  |
| Video boxes, Amazon Fire TV                                      | Jul 14, 49                         |  |
| Video-game consoles  | Dec 13, 44                         |  |
| PlayStation 4 vs. Xbox One                                       | Feb 14, 46                         |  |
| <b>W</b>   |                                    |  |
| Wall ovens   | Feb 14, 24; Jul 14, 34             |  |
| Washing machines   | Dec 13, 50; Aug 14, 36             |  |
| deep, short users and  | Feb 14, 10                         |  |
| Watches, smart   | May 14, 49                         |  |
| Samsung Gear 2   | Jul 14, 50                         |  |
| Wet wipes  | Feb 14, 11                         |  |
| Wi-Fi, free, at airports   | Sep 14, 10                         |  |
| Windows  | Oct 14, 36                         |  |
| Wines  | Dec 13, 12                         |  |
| white  | Jul 14, 8                          |  |



# Goofs, glitches, gotchas

**PITTSFORD \$729,000**

Custom-built Schoenberger colonial on a private lane overlooking a stocked, fresh water pond. Quality & craftsmanship will amaze you. Theatre, wine cellar, private getaway room!!

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**OPEN**

**SUN. 1-3**

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## LOCATION, LOCATION

A reader from Geneva, N.Y., sent in this real estate ad. Of the two, he'd pick the Webster house.



## LABELEASE

"What the heck is that supposed to mean?" asks our San Diego reader.

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**Reg. 109.99**  
240770

**Excludes dog & vehicle.**

## NO FIDO?

OK, we're willing to accept that the car is not included, but the dog isn't coming home with us either?

**Money**  
www.money.com

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*Lyndee King*

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**3-D® Premium Songbird Food**

• Bonus: 17 lbs. for the price of 20

**Bonus: 17 lbs. for the price of 20**

## FOR THE BIRDS

"What a bargain!" was the theme of the letters mailed to us by about a dozen readers from all over the country. The Walmart sales circular advertises a 17-pound bag of birdseed for the price of 20. "I think I'll take the 20-pound bag," says a Texas reader.

# Find out **how much to pay for a new car** with our expanded local pricing information

**The Consumer Reports New Car Price Report** shows you what others really paid, regional dealer marketing fees, and other information to help you get a great deal on a new car.

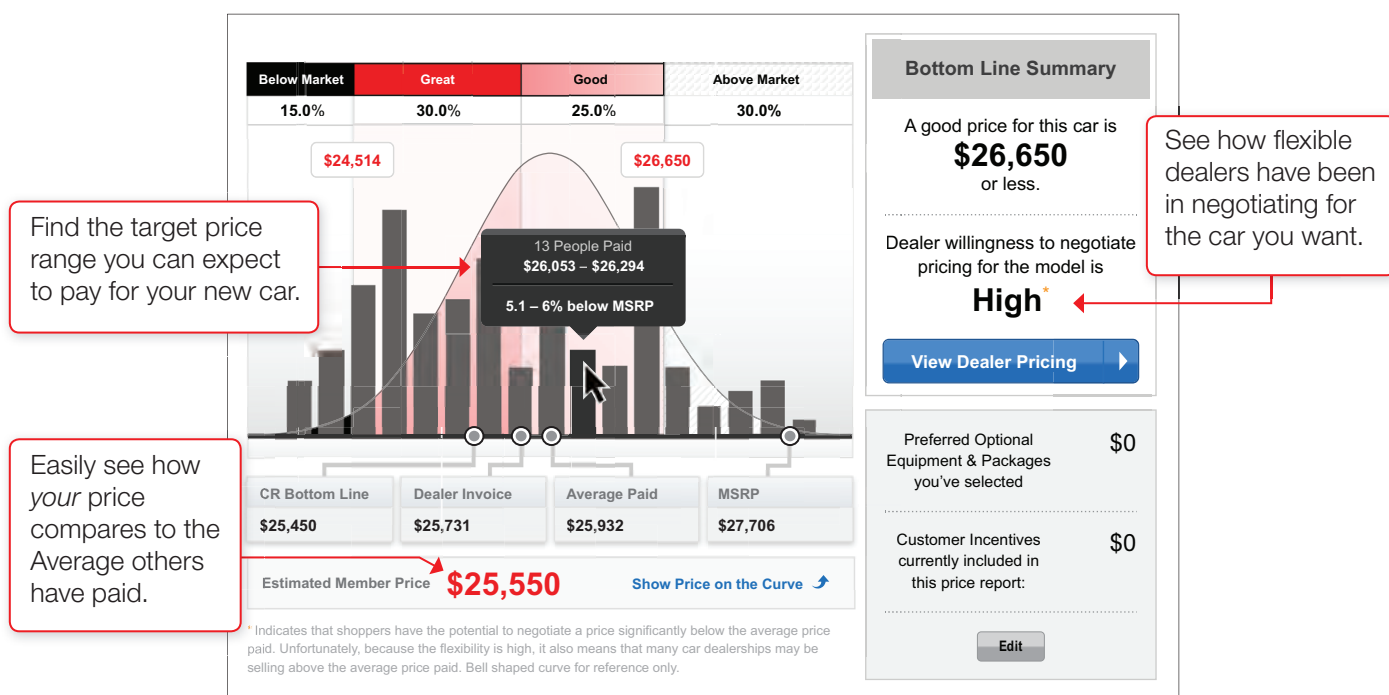
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PE44CURVES2

# Canada Extra

Information from CONSUMER REPORTS® for Canadian readers

## In this special section

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## 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](mailto:CanadaExtra@cu.consumer.org) and tell us what you think. We can't reply to every e-mail message 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.

## Irons Report and Ratings, page 46

Seven of the 40 tested conventional steam irons are available, including five of the recommended models.


| Rec. | Rank | Brand & model | Price | Overall score               |
|------|------|---------------|-------|-----------------------------|
|      |      |               |       | 0 100<br>P   F   G   VG   E |

**CONVENTIONAL STEAM IRONS** All have steam surge, vertical steam, and automatic shutoff.

|  |   |                           |       |    |
|--|---|---------------------------|-------|----|
|  | 1 | Rowenta Steamforce DW9280 | \$180 | 95 |
|  | 2 | Panasonic NI-W950A        | 135   | 93 |
|  | 4 | T-Fal FV4495 Ultraglide   | 70    | 88 |
|  | 5 | Singer Expert Finish EF   | 70    | 86 |

| Rec. | Rank | Brand & model | Price | Overall score               |
|------|------|---------------|-------|-----------------------------|
|      |      |               |       | 0 100<br>P   F   G   VG   E |

**CONVENTIONAL STEAM IRONS continued**

|   |    |                                  |       |    |
|---|----|----------------------------------|-------|----|
|  | 6  | Rowenta Effective Comfort DW2070 | \$ 70 | 85 |
|   | 8  | Rowenta Pro Master DW8080        | 130   | 83 |
|   | 10 | Rowenta Steamium DW9080          | 150   | 81 |



# Thermostats

Report and Ratings, page 42

Twenty of the 29 tested thermostats are available, including four of the recommended models.

| Rec. | Rank | Brand & model | Price | Overall score               |
|------|------|---------------|-------|-----------------------------|
|      |      |               |       | 0 100<br>P   F   G   VG   E |

## A THERMOSTATS WITH REMOTE ACCESS

|   |    |  |       |    |
|---|----|--|-------|----|
| ✓ | 1  | Honeywell RTH9590WF                          | \$400 | 90 |
| ✓ | 3  | Trane ComfortLink II Smart Control TZone 950 | NA    | 90 |
|   | 4  | Allure Energy EverSense                      | 400   | 89 |
|   | 5  | Venstar ColorTouch Series T5900              | 330   | 88 |
|   | 6  | Ecobee EB-STAT-02                            | 425   | 84 |
|   | 7  | Ecobee EB-SMARTSi-01                         | 200   | 83 |
|   | 8  | LockState Connect LS-90i                     | 200   | 73 |
|   | 9  | Nest Learning Thermostat                     | 250   | 69 |
|   | 10 | Aprilaire Communicating Touchscreen 8800     | 350   | 68 |
|   | 12 | Emerson Sensi 1F86U-42WF                     | 190   | 59 |
|   | 13 | Trane TZENT400BB3NK                          | 150   | 56 |

| Rec. | Rank | Brand & model | Price | Overall score               |
|------|------|---------------|-------|-----------------------------|
|      |      |               |       | 0 100<br>P   F   G   VG   E |

## B THERMOSTATS WITHOUT REMOTE ACCESS

|   |    |  |       |    |
|---|----|--|-------|----|
| ✓ | 1  | Honeywell Prestige HD YTHX9321R            | NA    | 95 |
|   | 5  | Honeywell RTH7500D                         | \$ 90 | 70 |
|   | 6  | Honeywell Touchscreen RTH8500D             | 130   | 69 |
|   | 7  | Honeywell RTH6350D                         | 50    | 68 |
|   | 8  | Lennox ComfortSense 7000 Series            | NA    | 67 |
|   | 9  | White-Rodgers Blue Easy Reader 1F95EZ-0671 | 170   | 67 |
|   | 10 | Lux TX9000TS                               | 95    | 66 |
|   | 12 | ICS TS830                                  | 80    | 60 |
|   | 14 | Insteon 2441TH                             | 150   | 48 |

# Space heaters

Report, page 40; Ratings, page 41

Four of the 26 tested space heaters are available, including two of the recommended models.

| Rec. | Rank | Brand & model | Price | Weight (lb.) | Overall score               |
|------|------|---------------|-------|--------------|-----------------------------|
|      |      |               |       |              | 0 100<br>P   F   G   VG   E |

**A SMALL HEATER** This compact electric model has a fan for faster heating.

|   |   |            |       |   |    |
|---|---|------------|-------|---|----|
| ✓ | 2 | Dyson AM05 | \$400 | 5 | 81 |
|---|---|------------|-------|---|----|

**B LARGE HEATERS** Some of these electric models are styled like furniture; all have fans.

|   |   |                                      |     |    |    |
|---|---|--------------------------------------|-----|----|----|
| ✓ | 3 | Duraflame 10HM4126-0107 <sup>②</sup> | 230 | 37 | 68 |
|   | 5 | Edenpure GEN4 <sup>②</sup>           | 397 | 26 | 57 |

## C RADIATOR-TYPE HEATER

|  |   |                                    |    |    |    |
|--|---|------------------------------------|----|----|----|
|  | 1 | Soleus Air HM2-15R-32 <sup>②</sup> | 80 | 11 | 58 |
|--|---|------------------------------------|----|----|----|

<sup>①</sup> Includes a ground-fault circuit interrupter plug for shock protection around water. <sup>②</sup> Has wheels.

# Point-and-shoot cameras Report and Ratings, page 47

Fourteen of the 24 tested point-and-shoot cameras are available. All are recommended models.

| Rec. | Rank | Brand & model | Price | Overall score               |
|------|------|---------------|-------|-----------------------------|
|      |      |               |       | 0 100<br>P   F   G   VG   E |

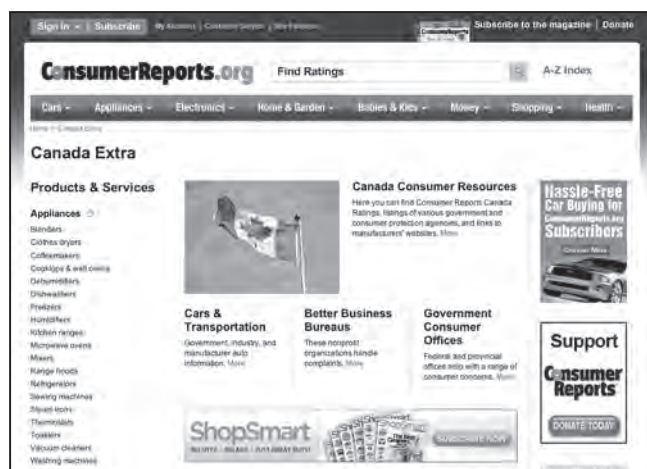
|   |   |                              |        |    |
|---|---|------------------------------|--------|----|
| ✓ | 1 | Canon PowerShot G1 X Mark II | \$ 800 | 78 |
| ✓ | 2 | Sony Cyber-shot DSC-RX10     | 1,100  | 72 |
| ✓ | 3 | Nikon Coolpix A              | 1,150  | 71 |
| ✓ | 4 | Sony Cyber-Shot DSC-RX100M2  | 700    | 71 |
| ✓ | 5 | Fujifilm X100S               | 1,400  | 69 |
| ✓ | 7 | Ricoh GR                     | 720    | 69 |
| ✓ | 8 | Panasonic Lumix DMC-LF1      | 400    | 68 |

| Rec. | Rank | Brand & model | Price | Overall score               |
|------|------|---------------|-------|-----------------------------|
|      |      |               |       | 0 100<br>P   F   G   VG   E |

|   |    |                          |       |    |
|---|----|--------------------------|-------|----|
| ✓ | 9  | Canon PowerShot G16      | \$500 | 68 |
| ✓ | 11 | Olympus Stylus 1         | 700   | 66 |
| ✓ | 12 | Nikon Coolpix P7800      | 550   | 65 |
| ✓ | 13 | Fujifilm X20             | 500   | 65 |
| ✓ | 14 | Pentax MX-1              | 300   | 65 |
| ✓ | 15 | Nikon Coolpix P340       | 400   | 64 |
| ✓ | 16 | Panasonic Lumix DMC-ZS40 | 450   | 64 |

## Canada Extra on the Web

Canada Extra information can be found on ConsumerReports.org, our website, along with the current issue of the magazine and more. The address is [ConsumerReports.org](http://ConsumerReports.org). Once there, click on the "Canada Extra" link on the opening screen. There you can see which reports have Canadian information available.



# Autos

Report and Ratings, pages 56-60

All of the tested vehicles are available in Canada.

| 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  |
| MIDSIZED SUV             |                   |                     |            |             |            |                                  |                 |          |
| Toyota Highlander Hybrid | \$43,720-\$52,695 | 3.4                 | 8.8        | 3.5         | 18.7       | 12.9                             | 7.3             | 9.4      |
| PLUG-IN HYBRID           |                   |                     |            |             |            |                                  |                 |          |
| Ford C-Max Energi        | 36,999-39,499     | 3.4                 | 8.6        | 3.9         | 18.7       | 2.7/6.6*                         | 2.4/6.2*        | 2.5/6.3* |
| LARGE SUVs               |                   |                     |            |             |            |                                  |                 |          |
| Chevrolet Suburban       | 52,555-70,785     | 3.0                 | 8.3        | 3.5         | 18.6       | 23.5                             | 10.2            | 15.2     |
| Chevrolet Tahoe          | 49,565-67,795     | 2.9                 | 8.1        | 3.8         | 18.3       | 22.7                             | 10.1            | 14.8     |

\*Running on electricity alone (liter/100 km equivalent)/running in hybrid mode.

## Contact info

How to reach manufacturers in Canada.

### Allure

866-874-1014  
allure-energy.com

### Aprilaire

888-257-8801  
aprilair.com

### Canon

905-795-2005  
canon.ca

### Duraflame

866-661-1218  
twinstarhome.com/duraflame

### Dyson

877-397-6622  
dysoncanada.ca

### Ecobee

877-932-6233  
ecobee.com

### Edenpure

800-372-2513  
edenpurecanada.com

### Emerson

905-948-3411  
emersonclimate.com/en-ca

### Fujifilm

800-461-0416  
fujifilm.ca

### Honeywell

763-954-5604  
honeywell.ca

### Insteon

866-243-8022  
insteon.com

### Lennox

800-953-6669  
lennox.com

### LockState

888-478-7225  
lockstateconnect.com

### Lux

856-234-8803  
luxproducts.com

### Nest

nest.com/ca

### Nikon

905-625-9910  
nikon.ca

### Olympus

888-553-4448  
olympuscanada.com

### Panasonic

800-561-5505 (irons)  
855-806-1175 (cameras)  
panasonic.ca

### Pentax

905-669-6406  
ricoh.ca

### Ricoh

905-669-6406  
ricoh.ca

### Rowenta

800-418-3325  
rowenta.ca

### Singer

800-474-6437  
singerco.com

### Soleus Air

800-445-6937  
lowes.ca

### Sony

888-289-7669  
sony.ca

### T-Fal

800-418-3325  
t-fal.ca

### Trane

903-581-3568  
trane.com/residential

### Venstar

venstar.com

### White-Rodgers

905-948-3411  
emersonclimate.com/en-ca