SECRETS TO GREAT CUSTOMER SERVICE

Social media. AI. Big data. What to know to get results, fast!

HOW TO AVOID ROOFING RIP-OFFS

IS ALL “PROCESSED” FOOD BAD FOR YOU?

8 WAYS TO PAY LESS FOR YOUR Rx MEDS

TRUSTED REVIEWS: Wireless Earbuds, Frying Pans, Fitness Trackers, Waffle Makers, Coffee Grinders

MOST & LEAST RELIABLE SUVS, CARS & TRUCKS

JANUARY 2020
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100% Independent
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Learn more about how you can make a difference.

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The more that food is altered from its original condition, the less healthy it tends to be, thanks in part to fats and sugar that get added along the way. We show the journey of some common foods—so you can choose wisely.

38 The Shocking Rise of Rx Drug Prices
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ABOUT CONSUMER REPORTS
Consumer Reports is an independent, nonprofit organization founded in 1936 that works side by side with consumers to create a safe, fair, and transparent marketplace. To achieve our mission, we test thousands of products and services in our labs each year and survey hundreds of thousands of consumers about their experiences with products and services. We pay for all the products we rate. We don’t accept paid advertising. In addition to our rigorous research, investigative journalism, and consumer advocacy, we work with other organizations, including media, consumer groups, research and testing consortiums, and philanthropic partners. We also license our content and data, as well as work with business partners to offer shopping and other consumer services, and may receive fees from these programs. We maintain a strict separation between our commercial operations and our testing and editorial operations. Our testing and editorial teams decide which products to test and review; our external business partners or other third parties do not dictate or control these decisions. Lastly, these partnerships and programs do not constitute CR’s endorsement of any products or services.

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

01 POOR /uni2003/uni2002
02 FAIR /uni2003/uni2002
03 GOOD
04 VERY GOOD /uni2003/uni2002
05 EXCELLENT

6 From the President: A Bitter Pill to Swallow
CR is helping to fight for more affordable drug prices.

7 Building a Better World, Together
Bringing clarity to cable bills, ending hidden fees at hotels, and keeping drug costs down.

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Leslie Winters, businesswoman and nurse practitioner.

Leslie wants to help CR keep the marketplace honest. She established a Charitable Gift Annuity (CGA) that supports CR’s mission—and also gives her tax-advantaged lifetime payments.

CGA Payment Example

This table shows how the CGA might work. Details, payment amounts, and charitable rates will vary based on your circumstances.

<table>
<thead>
<tr>
<th>Age</th>
<th>Donation amount</th>
<th>Tax deduction</th>
<th>Annual payment (for life)</th>
<th>Tax-free portion of payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>$25,000</td>
<td>$8,534</td>
<td>$1,400</td>
<td>$1,036</td>
</tr>
</tbody>
</table>

This is not legal advice. Consult a qualified estate and/or tax professional to determine the consequences of this gift.

To receive a personal illustration or request a complimentary brochure, contact Nancy Smith at 877-275-3425 or legacy@consumer.org

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A Bitter Pill to Swallow

AS CONSUMERS, we know the difference between products we want and products we need. For luxury or convenience items, it’s easy enough to hold off on a purchase if our budget demands it—but for the things we can’t live without, waiting for a good deal isn’t an option. That’s why it’s so alarming for many Americans to see the prescription drugs they rely on increasing in price every year, with some reaching truly unaffordable heights. U.S. consumers often pay more for medications than people in other industrialized nations—a long-standing national crisis that shows no signs of abating. In some cases, these price hikes force people to forgo medication, miss payment on important bills, or seek out a second job.

This month, in our special report, “The Shocking Rise of Rx Drug Prices,” on page 38, we break down the costs of prescription drugs to help you better understand why prices are rising so sharply. We outline the role that drug companies and insurers play, and we take a careful look at the role of the little-known industry middlemen (called pharmacy benefit managers) that play an outsized role in driving up consumer prices.

While federal lawmakers have introduced dozens of bills to rein in costs, Congress has failed to bring any meaningful legislation across the finish line in almost a decade. But at the state level, there are signs of progress. In October, California’s governor signed a pro-consumer bill prohibiting brand-name drug companies from paying rebates to pharmacy benefit managers. And that’s why CR is fighting hard to make sure you can get what you need without emptying your wallet, or sacrificing your health.

Marta L. Tellado, President and CEO
Follow me on Twitter @MLTellado
Building a Better World, Together

Join with us to make a safer, fairer, healthier marketplace

More Truth in Cable Charges

WHAT’S AT STAKE
Imagine your surprise if you learned in the supermarket checkout line that the cereal you wanted to buy would incur a Cardboard Box Surcharge and a Grain Refinery Fee, adding nearly 25 percent to the purchase price. It sounds absurd, but isn’t very different from what many consumers experience each time they pay their monthly cable bill.

That’s because pay-TV companies have increasingly imposed new fees for services once included in the base rates we see quoted in ads. With names such as Broadcast TV Fee and Regional Sports Surcharge, these add-ons often hit even customers who thought they’d locked into long-term “fixed-rate” contracts. These tactics camouflage price increases and stymie consumer efforts to comparison shop and maintain household budgets.

HOW CR HAS YOUR BACK
To determine just how big a problem these fees are, CR asked consumers to send in their cable bills; we then analyzed nearly 800 bills. The results were staggering. We found that company-imposed fees (which do not include regulatory charges or taxes) in effect add a 24 percent surcharge on top of advertised prices and cost the average customer nearly $450 per year. The report also made clear that providers often bury the fees deep in the fine print of monthly bills, often provide confusing or inaccurate information about fees to prospective customers, and sometimes inaccurately blame the government for them.

The findings add momentum to the CR-backed TRUE Fees Act, currently pending in Congress, which, among other things, would require telecom providers to advertise a single price inclusive of all fees. CR’s report, tweeted bill co-sponsor Sen. Richard Blumenthal, D-Conn., “sheds light on why cable is now drastically more expensive & putting increasing financial pressure on families for no good reason.”

WHAT YOU CAN DO
Sign our petition demanding that telecom companies eliminate hidden fees and clearly advertise the full price of service, at CR.org/cablefees0120.

Ending Hidden Hotel Fees

WHAT’S AT STAKE
In 2012 and 2013, the FTC issued warnings to 34 hotels and 11 online travel agencies, asking them to refrain from charging resort fees that aren’t disclosed in their advertised prices. Yet seven years later, this deceptive practice—which makes accurately budgeting for travel expenses all but impossible—remains widespread.

HOW CR HAS YOUR BACK
But the tide may now be turning on resort fees. A recent CR investigation found that 31 of the 34 hotels targeted by the FTC continue to charge resort fees and fail to include them when quoting prices and that none of the 10 online agencies still operating include resort fees in their initial quoted prices.

A month later, a bipartisan bill was introduced in the U.S. House of Representatives that, if passed, would require that all fees be disclosed in advance. In addition, in July the attorney general for Washington, D.C., filed a lawsuit accusing hotel giant Marriott International of price deception in the way it lists resort fees. And a similar suit was filed by Nebraska’s attorney general against Hilton later that month.

WHAT YOU CAN DO
For tips on avoiding hotel fees, go to CR.org/hotelfees0120. And tell us your own hidden-fee story at CR.org/wtf0120.

Keeping Drug Costs in Check

WHAT’S AT STAKE
The rising cost of prescription drugs is a daily challenge for many Americans. The average annual cost of a brand-name drug has more than tripled in just over a decade, jumping from $1,868 in 2006 to $6,798 in 2017, according to the AARP Public Policy Institute.

One way people can save money on drugs is to choose a lower-priced generic version. But brand-name pharmaceutical companies can stifle such competition through a practice called “pay for delay,” whereby they cut deals with makers of generic drugs to delay putting the generics on the market. A 2010 Federal Trade Commission study projected that these deals would cost consumers $3.5 billion in higher drug costs per year for 10 years.

HOW CR HAS YOUR BACK
CR has repeatedly advocated against pay-for-delay schemes. In October, California’s governor signed a CR-endorsed law that prohibits these agreements by declaring them presumptively anticompetitive.

WHAT YOU CAN DO
For more information, plus tips on keeping your drug costs in check, see “The Shocking Rise of Rx Drug Prices,” on page 38 of this issue.
Our special report “Should We Break Our Bottled Water Habit?” in the November 2019 issue investigated the purity and safety of bottled waters—a product that Americans spent $31 billion on in 2018. To add your voice to the conversation, go to CR.org/water0120.

Your article shows how the bottled water industry has fooled people into thinking that these bottles contain something healthier than they get out of their taps. Bottled water is the biggest hoax ever foisted on consumers. There are cases, of course, in which bottled water is essential, e.g., natural disasters and situations like in Flint, Mich., where the water quality has been bad or dangerous. But in the vast majority of cases, it’s a waste of money and an affront to the environment—especially when it is bottled on a Pacific island and shipped abroad. Thanks for helping us see what is the right thing to do.

—Charlie Bouchard, St. Louis

To me, this bottled water thing is about the craziest fad in my lifetime. Except in cases like Flint, Mich., there should be a 50 cent per bottle deposit on water bottles. That would remove billions of bottles from landfills, because people wouldn’t want to mess with returning the bottles and wouldn’t want to pay the deposit if they would throw the bottles in the trash.

—Christopher Gerhart, Cape Canaveral, FL

The main reason I avoid bottled water: cost. Both to me and the environment. I would estimate a family could spend about $1,000 a year on bottled water, while the cost of tap water is virtually nothing. If that money were invested in a stock mutual fund, it would nicely enhance anyone’s retirement. Perhaps a subject for a future article: the environmental cost to produce the plastic, the cost to produce the plastic, or the cost to recycle or to dispose of the plastic if it’s not recycled.

—Tony Wagner, Madison, WI

Thanks for your article on water. I feel it’s important to ensure whatever we are putting into our bodies isn’t tainted with contaminants. I would suggest that in light of the startling information in the article, even more testing of water filters would be helpful to consumers.

—Joseph Ferramosca, Bellrose, NY

Your article didn’t mention that most community water supplies have added fluoride to help prevent dental decay. Sometimes this is even state mandated. Bottled waters do not report if they have fluoride.

—Sheldon Bernick, D.D.S., Philadelphia

Editor’s Note: The addition of small amounts of fluoride to drinking water has clearly helped reduce cavities. Not all bottled waters contain fluoride at recommended levels. And bottled water labels don’t have to list how much fluoride they do contain (unless the manufacturer has added it within set limits), so it can be difficult to know whether the product you buy has enough to protect teeth.

It puzzles me that whenever I read an article on water quality, there is never a mention about distillers. I have used the same distiller for over 20 years and I am able to distill up to 4 gallons a day for pennies. Distillation removes dangerous and unpleasant contaminants. Some complain that distilled water can taste flat; however, I love it.

—Ralph Edwards, Flint, MI

Editor’s Note: Though CR has not tested home distillation devices, the process—which involves boiling water, then condensing the steam back into a liquid to remove contaminants—can be a good option for people who live in homes or communities with high levels of harmful substances, such as arsenic or lead, in the water.
I WAS EXCITED to see that the November issue included a section on plant milks ("Almond? Oat? Soy?"). Being lactose intolerant, I have tried more plant milk varieties than I would like to admit. I was eager to see the comparison chart on nutrition, taste, and such, but why didn’t you include rice, flax, and others? After trying out so many kinds, I found that I prefer flax milk. For folks who are lactose intolerant, have a milk allergy, or are vegan by choice, I would hope that this topic gets revisited again.

—Birdie H., Cookeville, TN

EDITOR’S NOTE We focused our testing on plant milks from the largest-selling categories. Almond milk by far is the category leader, with soy and coconut distantly following. We included oat milk because it’s growing in popularity. Flax and rice milks have small markets, and in CR’s tests in 2014, we found rice drinks to contain significant levels of arsenic.

WHERE AMERICANS TEND to struggle is with calories, fat, and sugar, and one tactic to manage that is to make small sustainable changes throughout the day. Consider the math on replacing 2 ounces of 2% cow’s milk in your coffee every day with unsweetened almond milk; that equates to more than 2 pounds of body fat at the end of the year.

—Steph Bilovsky, San Clemente, CA

I FOUND YOUR COMPARISON of plant-based milks helpful. I was surprised, however, that you seem to caution against these milks because they have less protein than milk from a cow. Few people in this country have protein deficiencies.

—Jef Friedman, Gig Harbor, WA

A HIGHER PROTEIN content should not give dairy a higher mark in a country that grossly overconsumes protein and is a stranger to protein-energy deficiency.

—Emilie Cassou, Washington

EDITOR’S NOTE You certainly don’t need to drink milk—cow or plant—to have a healthy diet, and it’s true that most Americans get enough protein. However, when evaluating a food that is meant to be used in place of another, our experts believe you should consider how the replacement food compares with the original.

If you don’t drink cow’s milk, you need to consider getting the nutrients it supplies, such as calcium and protein, from other sources. And though switching from 2% milk to unsweetened almond could save you about 8,000 calories annually, the “3,500 calories per pound of weight loss” rule is a gross overestimation. Small dietary changes do help, but a lot of factors contribute to weight loss, so the amount of weight lost can vary by individual.

I HAVE FOUND that milks derived from peas have the same amount or more protein than animal milk, and taste better than the alternatives you reviewed. I find oat milk terrible tasting. Also, it’s my understanding that soy milks, like most soy products, contain a natural version of estrogen, and a high level of one type of estrogen might increase the risk of developing cancer.

—Steven Boisvenu, via CR.org

EDITOR’S NOTE: It’s true that soy contains plant compounds that can act like estrogen in the body. However, the evidence doesn’t support the belief that eating soy foods is harmful to your health, nor suggest it may increase breast cancer risk. It’s best to avoid soy supplements though, because they contain highly concentrated amounts of the estrogen-like compounds and not enough research has been done on supplements’ effects.

I SEE THAT soy milks are the top-rated nutritionally of the plant milks you covered. You have noted previously that it’s difficult to find U.S. soy products that are not genetically modified. Are the soy milks you tested labeled for their GMO content?

—Martha Petretti, DeLand, FL

EDITOR’S NOTE: Of the 35 plant milk products we evaluated for our article, 26 were Non-GMO Project Verified. Of the six soy milks we tested, four had the Non-GMO seal—which CR rates Excellent in our label ratings. Note that USDA certified organic foods are not allowed to have GMOs, so even if an organic milk does not have the Non-GMO seal, it still won’t contain GMOs.
What We’re Testing in Our Labs ...

In our 63 labs, we continually review and rate products. Here, timely picks for this month.

### Frying Pans

**WE TESTED:** 13 uncoated pans  
**WE TEST FOR:** How well a pan turns out evenly browned pancakes on a gas range, how evenly it can sauté food, handle sturdiness, and more.  

**ABOUT THE SCORES:**  
Median: 61  
Range: 46-78

<table>
<thead>
<tr>
<th>Cream of the Culinary Crop</th>
<th>Lifetime Warranty</th>
<th>Works with Induction, Too</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brooklyn Copper Sauté</td>
<td>Mauviel 6544.26 M250C Copper</td>
<td>All-Clad C4 Copper C4110</td>
</tr>
<tr>
<td>$480</td>
<td>Copper</td>
<td>$200</td>
</tr>
<tr>
<td><strong>OVERALL SCORE</strong></td>
<td><strong>78</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

### Coffee Grinders

**WE TESTED:** 8 models  
**WE TEST FOR:** How well a model grinds coffee beans into coarse, medium, and fine grounds; clarity of controls; ease of cleaning; and operating noise.  

**ABOUT THE SCORES:**  
Median: 65  
Range: 47-76

<table>
<thead>
<tr>
<th>Great All-Around Grinder</th>
<th>Best for Drip Brew</th>
<th>Quietest Grind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxo Brew Conical Burr</td>
<td>Breville the Smart Grinder Pro BCG820</td>
<td>Capresso Infinity Conical Burr Grinder 560.04</td>
</tr>
<tr>
<td>$100</td>
<td>$200</td>
<td>$100</td>
</tr>
<tr>
<td><strong>OVERALL SCORE</strong></td>
<td><strong>76</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

### Ask Our Experts

**My coffee-bean grinder has tons of settings. How do I use them?**

It’s true that some grinders have up to 60 settings. They exist to create different-sized grounds tailored to the type of coffee you’re making. In our labs, CR engineer Ginny Lui tests every grinder for three settings. Coarse (usually the higher settings) is best for a cold-brew machine and a French press because they have a longer steeping process that needs bigger grounds. Medium-sized grounds are best for your everyday hot cup of drip joe; the Breville above has a medium setting that’s rated Excellent. Fine grounds (usually the lower settings) are best for espresso. But extra settings don’t automatically mean better results. Our top performer, the Oxo, does a great job with just 15.
### True Wireless Earbuds

**We Tested:** 28 stereo models  
**We Test For:** Sound quality, including tonal accuracy, clarity, and more. We also assess each model for fit.

**About the Scores:**  
Median: 66  
Range: 40-86

<table>
<thead>
<tr>
<th>Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best Overall</strong> Samsung Galaxy Buds</td>
<td>86</td>
<td>$130</td>
</tr>
<tr>
<td><strong>Rechargeable Case Adds 15 Hours of Play Time</strong> Anker Soundcore Liberty Air</td>
<td>76</td>
<td>$80</td>
</tr>
<tr>
<td><strong>Long Warranty for Less</strong> JLab Audio Jbuds Air</td>
<td>76</td>
<td>$50</td>
</tr>
</tbody>
</table>

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### Ellipticals for $1,000 and Under

**We Tested:** 10 models  
**We Test For:** Construction, including noise, feel, and ride; ease of use of the controls, display, and exercise programs; ergonomics; and more.

**About the Scores:**  
Median: 64  
Range: 47-74

<table>
<thead>
<tr>
<th>Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top Performer &amp; Quality Build</strong> Schwinn 470</td>
<td>74</td>
<td>$900</td>
</tr>
<tr>
<td><strong>Great Heart-Rate Features</strong> Nautilus E616</td>
<td>71</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Nice Price Without Heart-Rate Programs</strong> Horizon Fitness EX 59</td>
<td>63</td>
<td>$650</td>
</tr>
</tbody>
</table>

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### Fitness Trackers

**We Tested:** 17 models  
**We Test For:** Ease of use, interaction and pairing with another device, step-count and heart-rate monitor accuracy, water resistance, readability, and more.

**About the Scores:**  
Median: 69  
Range: 35-85

<table>
<thead>
<tr>
<th>Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Big LCD Display &amp; Accurate Step Counts</strong> Garmin Forerunner 35</td>
<td>84</td>
<td>$130</td>
</tr>
<tr>
<td><strong>Color AMOLED Touch Screen</strong> Samsung Galaxy Fit</td>
<td>76</td>
<td>$100</td>
</tr>
<tr>
<td><strong>Slim Touch Screen</strong> Fitbit Inspire HR</td>
<td>73</td>
<td>$100</td>
</tr>
</tbody>
</table>

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### Toilets

**We Tested:** 35 models  
**We Test For:** The ability to move simulated solid waste through the bowl and trap, noise of flushing, how well flushing cleans the bowl per gallons of flush, and more.

**About the Scores:**  
Median: 67  
Range: 38-79

<table>
<thead>
<tr>
<th>Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Powerful Flush, but Noisy</strong> Kohler Highline Classic K-3493 (pressure-assist)</td>
<td>76</td>
<td>$425</td>
</tr>
<tr>
<td><strong>Very Good Flush for Less</strong> American Standard Champion 4 Max (gravity)</td>
<td>75</td>
<td>$240</td>
</tr>
<tr>
<td><strong>Quietest Commode</strong> Delta Turner C43908-WH (gravity)</td>
<td>70</td>
<td>$170</td>
</tr>
</tbody>
</table>

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Note: We rate different products according to different testing protocols. As a result, Overall Scores of one product category aren’t comparable with another.
Is hand sanitizer just as good as washing with soap and water?

According to the Centers for Disease Control and Prevention, your first choice should always be to wash hands with soap and water. It does a better job of getting rid of dirt; harmful chemicals, such as pesticides; and certain types of germs, such as the highly contagious norovirus, Cryptosporidium (which causes diarrhea and vomiting), and the potentially deadly infection C. difficile.

A recent study also found that hand-washing may be better than sanitizer at eliminating flu virus (though the study didn’t account for rubbing sanitizer in, which improves its performance).

When you wash your hands, scrub for at least 20 seconds, making sure to wash the fronts and backs, under your nails, between fingers, and under jewelry. Water temperature doesn’t matter, and plain old soap will do.

But if you can’t get to a sink, or you need to quickly protect your hands often while at work (healthcare providers are a good example), hand sanitizer is a good choice. Though not as effective as washing in some situations, sanitizer still kills many bacteria and viruses, such as those that cause colds, and can be gentler on skin than repeated soap-and-water scrubbing. Make sure to use a product that’s at least 60 percent alcohol—the ingredient that kills germs. Use enough to cover the backs and fronts of your hands, and rub it in until your skin is dry.

Brokerages now offer ‘zero fee’ trades. Is there a catch?

Eliminating trade commissions (a common investment fee) is a current trend, says Penelope Wang, a senior money editor at CR. Charles Schwab, which previously charged $4.95 per trade, says it will eliminate online trading commissions for U.S. stocks, exchange-traded funds (ETFs), and options. And it’s not alone: E-Trade, Fidelity, and TD Ameritrade have announced zero-fee commissions for online stock, ETF, and option trades. Robinhood, an investing app, has offered zero-commission trades since 2015.

These “zero fee” offerings may sound enticing, but they might not save you much money—especially if you’re a small, personal investor. The lack of commission fees may encourage you to trade more often, Wang says, which could end up hurting your returns more than it helps. Numerous studies have found that investors who trade often tend to underperform over the long run. That’s true even for professional money managers, who typically lag behind their benchmarks, according to data from S&P Dow Jones Indices.

Most personal investors are better off buying and holding a simple index fund portfolio for the long term. Another option: Choose a low-cost target-date retirement fund, which gives you an all-in-one diversified portfolio that shifts to be more conservative as you approach your retirement date. Just be mindful of other expenses that can add up over time, such as fund management and account maintenance fees.

What does a ‘locked’ or ‘unlocked’ phone mean?

“A ‘locked’ phone means it will work only with your current carrier’s service,” says Richard Fisco, who oversees electronics testing at CR. If you bought a locked iPhone through AT&T, for example, you’ll be able to use it only with AT&T service. Unlocking it allows you to move to a new network. (But you can keep using your original carrier with an unlocked phone.)

If you didn’t request an unlocked model when you purchased your phone, it’s probably locked.

Every carrier has a different unlocking process, but most are pretty simple. Phones bought through Verizon, for example, are automatically unlocked 60 days after the phone is purchased. AT&T, on the other hand, first requires that your device be fully paid off and that you aren’t in an active service contract (either it ended or you forked over an early termination fee). Eligible customers can submit a form at att.com/deviceunlock. AT&T will confirm that your phone is unlocked within two business days of a confirmed request. Other providers, such as Sprint, may require you to call customer service to start the process. For instructions by carrier, go to CR.org/unlock0120.
TODAY’S SMARTPHONES ARE truly stunning—but so are their hefty prices; the top five ranked models in CR’s ratings all cost around $1,000. So our labs scrutinized our test results on a handful of phones under $500, and two Android models, at right, rose to the top in performance.

The Samsung Galaxy A50 has a super-sharp 6.4-inch OLED display, a battery that lasted 34 hours, and a good amount of storage. The biggest drawback, says Rich Fisco, head of CR’s electronics testing, is that you’ll need a case for this one. After 50 drops in our tumbler (sans case) the A50’s glass broke, and the phone died.

The Google Pixel 3a XL, which has a smidge smaller OLED display at 6 inches, made it through 100 drops with just some minor scratches. That may make it a better choice if you’re clumsy. However, its battery ran out slightly faster than the A50’s in our testing, at 32.5 hours.

Both models are only middle-of-the-road in camera quality, but with excellent displays and performance, they still have a lot to offer at reasonable prices—particularly the A50, a CR Best Buy.
YOU MAY THINK a waffle maker is a one-trick pony. But this simple appliance’s nonstick grid is a versatile tool: You can find recipes for making waffle-shaped hash browns, omelets, mozzarella sticks, brownies, and more.

Start with a waffle maker that can nail its main job. In our tests, we whip up batches of Krusteaz Belgian Waffle Mix following the manufacturer’s cooking instructions and use a spectrophotometer that scans the waffles for color variation to assess cooking evenness. “The best models make the process almost foolproof,” says Tara Casaregola, CR’s lead cooking appliance tester. The top one in our tests (above), though pricey compared with others we tested, has a countdown timer, an audible indicator that tells you when the cooking is done, and a portioned batter cup to eliminate any guesswork.

**CR Money Saver**

Many Happy Returns

An estimated $72 billion worth of holiday merchandise is returned to U.S. retailers annually. Our chart compares some of the most generous standard return policies among a mix of popular retailers. (Others, such as Amazon, ABT, and Sears, offer 30-day returns, and Best Buy has a policy of just 15 days.) Still, know that many stores typically extend return windows over the holidays into January, so even if you think you’ve missed a return deadline, it’s worth double-checking.

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**CR Time Traveler**

**Tires**

1938 We rate 15 tires: Goodrich rises to the top as a “Best Buy,” averaging a cost of 3.9 cents per 100 miles driven.

1942 Our tests of eight brands of tire gauges reveal some to have inaccurately low readings. But 5 out of 10 filling stations we tested were inaccurately high—a cause of underinflation and excessive tire wear.

1948 Our first annual auto issue debuts. Inside, we highlight new trends in postwar cars, such as spare tires being carried flat inside the trunk rather than on the back.

1953 Before our road tests, and again after being driven on for 800 miles, engineers weigh each tire on our specially constructed scale—accurate to 1 gram—to determine the rate of rubber loss.
### Table: Return Policies and Procedures

<table>
<thead>
<tr>
<th>Store</th>
<th>Time Frame</th>
<th>Proof of Purchase</th>
<th>Who Pays for Return Shipping?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COSTCO</strong></td>
<td>180 days</td>
<td>Required</td>
<td>For most online orders. You can print out a free return label on its website.</td>
</tr>
<tr>
<td><strong>SAM’S CLUB</strong></td>
<td>90 days</td>
<td>Required but not required.</td>
<td>Not required. Products purchased in store or online can be returned at any Sam's Club location.</td>
</tr>
<tr>
<td><strong>BED BATH &amp; BEYOND</strong></td>
<td>180 days with exceptions</td>
<td>Required</td>
<td>The customer service can help process the return.</td>
</tr>
<tr>
<td><strong>KOHLS</strong></td>
<td>21 days</td>
<td>Required, An original receipt or printed order is preferred, but if it’s not available, the customer service can help process the return.</td>
<td>Customer. For most online orders, you can print out a free return label on its website.</td>
</tr>
<tr>
<td><strong>LOWE’S</strong></td>
<td>90 days or less, with exceptions.</td>
<td>Not required.</td>
<td>Most items can be returned to a store or via a shipping service.</td>
</tr>
<tr>
<td><strong>HOME DEPOT</strong></td>
<td>90 days, but 30 days for some items.</td>
<td>Required.</td>
<td>Items bought with a store card can be returned within a year. Items can be returned to a store or via a shipping service.</td>
</tr>
<tr>
<td><strong>WALMART</strong></td>
<td>90 days</td>
<td>Required.</td>
<td>Items bought with a store card can be returned within a year. Items can be returned to a store or via a shipping service.</td>
</tr>
</tbody>
</table>

### Additional Information

- **1977** Goodyear introduces the first all-season tire—the Goodyear Tiempo—selling 3.5 million in its first year on the market.

- **1988** Dodge Charger wheel covers are a “Don’t Buy.” They rotate during use and can’t be removed without damage. Getting a flat would be an “exercise in frustration,” we warn.

- **1993** Our tire testers use an electronic device (shown below) to track speed and distance in our dry- and wet-braking tests. A new tire with an “odd design,” the Goodyear Aquatred, is tops in our ratings.

- **1988** The Michelin Man mascot, named Bibendum, turns 100 years old. When he was created, tires were mostly grey-white or beige, thus his coloring.

For more ratings, All-Access and Digital members can go to CR.org/tires0120.
IN THE KNOW

HOW TO PREVENT VEHICLE FIRES

PASSENGER VEHICLE FIRES aren’t as rare as you think. In the U.S., there were about 142,000 each year from 2014 through 2016, according to the Federal Emergency Management Agency (FEMA). That’s an average of just under 400 per day. Collisions were a contributing factor in only 5 percent of highway vehicle fires. Instead, most fires originate within the vehicle itself (see graphic above), often as a result of mechanical problems, including a leak or break in a vehicle component. But there’s plenty you can do to help prevent fires from starting in the first place.

LOOK FOR LEAKS
If you see puddles under your car or notice fuel or oil levels dropping more quickly than usual, get it checked as soon as you can, says John Ibbotson, chief mechanic for CR. And service your car regularly, regardless: A well-maintained car is less fire-prone.

KNOW WHAT’S TOO HOT
Become familiar with your vehicle’s engine temperature gauge on the dashboard. If you know what’s normal, you can better recognize dangerous increases. And never ignore the smell of burning rubber or plastic.

KEEP OFF THE TALL GRASS
Don’t park a car where flammables, including grass, are touching the catalytic converter, which sits under the front half of your car and can reach temperatures above 1,000° F.

CHECK YOUR WIRES
Electrical problems played a role in 21 percent of all vehicle fires, according to FEMA, so lift the hood and do spot checks for cracked or loose wiring. Also, if your car blows a fuse more than once (an indicator light doesn’t work or your car has trouble starting), that can be a warning sign; bring it to a mechanic.

TRANSPORT GAS PROPERLY
If you must transport gasoline, carry only a small amount in a certified gas can that’s sealed, the National Fire Protection Association (NFPA) suggests. Keep a window open for ventilation. Gas cans and propane cylinders should never be transported in the passenger compartment if you can help it. And be careful not to spill: “Misuse,” such as spilling flammable liquid or gas too close to the vehicle, was the third-leading factor contributing to the ignition of vehicle fires.

SNUB OUT CIGARETTES
The heat source for 7 percent of all vehicle fires came from open flames or smoking materials, such as cigarettes, cigars, matches, and the like.

WHERE HIGHWAY VEHICLE FIRES START

62% Engine, running gear, or wheel area
12% Passenger and driver area
3% Exterior surface
5% Cargo or trunk
9% Other

WHAT TO DO IN THE EVENT OF A CAR FIRE

1. Pull over and shut off the engine. This stops the flow of fuel.
2. Get everyone out as quickly as possible. Make sure to stay at least 150 feet away, and never go back to retrieve items. Stand clear of oncoming cars.
3. Never open the hood or trunk; the rush of airflow could give the fire a boost.
4. Call 911.
5. Don’t attempt to put out the fire unless you have a Class B or C fire extinguisher that you know how to use from a safe distance.

For more info, go to CR.org/buy0120.
MORE REALISTIC, PROMINENT SERVING SIZE

THE BOLDED SERVING SIZE for many foods, such as soft drinks, ice cream, bagels, and cereal, has been increased to better reflect what people eat in one sitting. For packages that hold between one and two servings, the nutrition information must now be presented for the entire package. If the package holds between two and three servings but they could be eaten in one sitting—such as a pint of ice cream—the label must show nutrition info for both one serving and the whole package.

CR INSIGHT: By law, serving sizes are based on the amounts that people typically consume—but that doesn’t mean you should eat that much. For less-than-healthy foods, keep portions on the smaller side.

Resolving to eat healthier may be a lot easier this new year, thanks to the revamped Nutrition Facts Label, which makes its debut—mandated by the Food and Drug Administration—on many food items in January (though some products and manufacturers have until July 2020, January 2021, or July 2021 to comply). Charlotte Vallaeys, M.S., senior policy analyst for food and nutrition at CR, explains four changes that will be most useful.

THE BOLDER SERVING SIZE

ON THE LABEL, vitamins A and C have now been replaced with vitamin D and potassium, because Americans don’t get enough of these. The label must also list the actual amount (in milligrams or micrograms) in addition to a “Daily Value” percentage.

CR INSIGHT: To more fully understand where a food’s nutrients are coming from, you should also scan the ingredients list: If a vitamin or mineral is also listed there, it means it was added to the food. Getting nutrients naturally from food is generally better for you than getting them from those added in.

BIGGER, BOLDER CALORIE COUNT

“THE NUMBER OF CALORIES in a serving really pops now,” Vallaeys says. Calories are a unit of energy—consume more than you need and your body stores the excess as fat.

CR INSIGHT: Note the calorie count, but also consider where those calories are coming from. “Eating 250 calories’ worth of nuts is very different from eating a 250-calorie Snickers bar,” Vallaeys says. The calories in nuts supply protein, healthy fats, and nutrients such as magnesium and fiber, while the Snickers bar has 25 grams of added sugars.

ADDED SUGARS

THE TOTAL SUGARS line encompasses both the food’s naturally occurring sugars as well as those added in processing, such as high fructose corn syrup. The new line indicating the subset of added sugars is important because those are the ones you want to limit to 50 grams a day or less on a 2,000-calorie diet.

CR INSIGHT: Requiring food makers to separate out added sugars might create an incentive for them to reduce the amount they add. Of course “some manufacturers may swap in sugar substitutes, such as sucralose or stevia, or sugar alcohols, such as sorbitol or mannitol,” Vallaeys says. So if you see a sugar reduction in your favorite food, you can check the ingredients list to see whether these substitutions were made.

NEW VITAMIN & MINERAL AMOUNTS

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SAFETY UPDATE
DRESSER THAT FAILED CR'S TESTS IS RECALLED

After years of inaction, several key steps have finally been taken to protect children and other vulnerable consumers from dangerous furniture tip-overs, and the progress is due in no small part to CR’s efforts.

Since our 2018 dresser stability testing, CR and other safety advocates have pushed for a stronger tip-over standard that would apply not only to taller dressers (those taller than 30 inches) but also to shorter ones. Those shorter dressers were not covered by the industry’s voluntary standard, even though shorter dressers have been linked to tip-overs that have caused injuries and deaths. In August, the standards-development organization ASTM International published an updated standard that includes dressers and other clothing storage units that are 27 inches and taller. This revision adds critical protection for children from shorter dressers.

CR also backed a bill—which passed in the U.S. House of Representatives and is now headed for the Senate—called the Stop Tip-overs of Unstable, Risky Dressers on Youth (STURDY) Act. The legislation would require the Consumer Product Safety Commission to create a mandatory federal rule for dressers that’s tougher than the industry’s current voluntary standard. The proposed improvements would more accurately reflect the weight of a young child on a dresser, as well as the way people use them. “Fortunately, a bipartisan group of the CPSC’s leaders support a stronger standard, so now Congress needs to pass the STURDY Act to make sure the CPSC can act quickly,” says William Wallace, CR’s manager of home and safety policy.

What’s more, the CPSC recently finished testing more than 150 clothing storage units for compliance with the voluntary stability standard and found that some dressers failed in those tests, which led to recalls of unstable dressers. One example: Ridgewood Industries (also known as Ameriwood Home) recalled about 1 million Belmont four-drawer dressers—including a 29¾-inch tall dresser that failed CR’s tip-over tests. The dressers were sold by Kmart and Sears between April 2013 and September 2019 for about $40. The dressers, which have been sold as the Essential Home Belmont, the Ridgewood Belmont, and the Ameriwood Belmont, come in four colors and two sizes, ranging in height from 29¾ inches to 32¼ inches.

During CR’s testing of the 29¾-inch Belmont dresser, short dressers (those 30 inches tall or less) weren’t covered by the industry’s voluntary standard. When CR informed Ameriwood Home of our test results at the time, a spokesperson said that “any dresser below 30 inches height should not have been tested ... as it is completely out of the scope of [the voluntary] standard.” When asked why it recalled the product now, a company spokesperson said that it “made a cautionary move to recall the 4-drawer Belmont dresser, regardless of the fact that no incident or injury has been reported.”

According to the CPSC, the recall of the 29¾-inch Belmont is the first recall of a model 30 inches tall or less with no associated injuries or deaths. “If dressers are unstable and could hurt kids, the law requires furniture makers to recall them. And that’s as true for short dressers as for tall ones,” says Wallace. “The CPSC has now made that clear.”

What to do: Move the recalled dresser to a spot where children can’t access it. Ameriwood Home isn’t offering a refund. It will provide a free anchoring kit to secure the dresser to a wall and a free in-home installation of a wall anchor strap; go to Ameriwoodhome.com/eng/support. We think that plan doesn’t go far enough. “The option of a full refund is an incentive to get the product out of the home and keep children safe,” says Wallace, CR’s advocate.

RECALLS
TO STAY INFORMED ABOUT RECALLS FOR YOUR VEHICLES, READERS WITH MEMBERSHIP CAN USE OUR FREE CAR RECALL TRACKER AT CR.ORG/MORE.

CONTIGO WATER BOTTLES

Contigo is recalling about 5.7 million Kids Cleanable water bottles. The silicone spout can detach, posing a choking hazard for kids. The bottles were sold at Costco, Target, Walmart, and other stores nationwide and online from April 2018 through June 2019 for $9 to $24.

What to do: Take the water bottle away from children and call Contigo at 888-262-0622 or go to gocontigo.com for inspection instructions and to get a free replacement lid.

HARBOR FREIGHT TOOLS KNIVES

Harbor Freight Tools is recalling about 1.1 million Gordon folding knives because the locking mechanism can fail to engage when you extend the blade, posing a laceration hazard. The knives were sold at Harbor Freight Tools stores, by telephone, and online at harborfreight.com from July 2008 through July 2019 for about $5.

What to do: Stop using the knife and return it to a Harbor Freight Tools store for a full refund in the form of a $5 store gift card. Call 800-444-3353 or go to harborfreight.com for details.

RONSON TORCHES

Zippo is recalling about 660,000 Ronson Tech Torches because the torch can continue to produce a flame after the trigger is released into the Off position, posing a fire hazard. The torches were sold at Ace Hardware, Walmart, and other stores nationwide and online at zippo.com and amazon.com from February 2010 through July 2019 for $30 to $40.

What to do: Stop using the torch. Go to ronsonrecall.com or zippo.com for details on a refund in the form of a gift card.
Raise Your Roof IQ

Feel in over your head when it comes to choosing the right roof? Let our experts guide you.

by Tobie Stanger

The cost to replace a roof by house size

<table>
<thead>
<tr>
<th>House Size</th>
<th>Cost Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200 sq. ft.</td>
<td>$4,500 to $6,500</td>
</tr>
<tr>
<td>2,000 sq. ft.</td>
<td>$7,400 to $10,500</td>
</tr>
<tr>
<td>3,000 sq. ft.</td>
<td>$11,200 to $16,000</td>
</tr>
</tbody>
</table>

Source: HomeAdvisor True Cost Guide.

In its inaugural use, our accelerated weathering tester gets fed shingles by CR engineer Misha Kollontai, in an exercise that’s as tough on roofing as Mother Nature.

PRODUCT UPDATE
THE LATEST RATINGS FROM OUR LABS

INSIDE CR’S LABS

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Product Update

**FOR THE FIRST** time in more than a decade, CR’s labs have returned to the work of rigorously testing asphalt roofing products. We focused on asphalt because it’s the most commonly used residential roofing material.

Within asphalt, there’s a lot to consider. Start by looking at shingle types, including three-tab, architectural, and multilayered (all of which you’ll find in our ratings on page 23). In our recent strength tests on products from six manufacturers, we found that the most costly type—multilayered architectural shingles, typically with three to four layers that overlap—generally performs better overall than other styles.

But our testing also revealed lower-cost options with fewer layers that still perform admirably. “For most homes, a top-performing three-tab, which has only one layer, or architectural laminated shingles will work just fine,” says Misha Kollontai, who leads CR’s tests of roofing products.

What’s more, you can find savings among similarly rated multilayered architectural laminated shingles. For instance, Iko Crowne Slate costs $180 per 100 square feet—a standard roofing quantity—compared with CertainTeed Presidential Shake at $325. That’s an 81 percent price difference for similar performance.

**Inspect the Shingle Warranty**

Once you start looking at shingles, you might be impressed by how many manufacturers offer lifetime protection. But in roofing parlance, a lifetime really isn’t a lifetime. It’s more like 10 years. That’s the period during which most manufacturers will pay the roof’s original owner in full to replace defective shingles under the baseline warranty. After that—and for the rest of the period you own your home—it’ll reimburse only for your shingles’ depreciated value. To extend the full-replacement period, you have to either upgrade to a different shingle or buy more of the manufacturer’s components. Another way to upgrade: Use a contractor who’s certified or otherwise credentialed by the company.

For instance, most Owens Corning shingles come with a “lifetime” warranty that covers full shingle replacement for only the first 10 years. Going with the company’s Preferred or Platinum contractors, though, can extend the 10-year full-pay period to 50 years.

You may think of roofing warranties as an extension of coverage, “but they’re also limiting the manufacturer’s liability,” says Mark Graham, vice president of technical services at the National Roofing Contractors Association, a trade organization based in Rosemont, Ill. A roofing warranty won’t pay if the shingle maker finds problems in your home’s ventilation. And manufacturers usually won’t cover damage from certain acts of God, such as very high winds and hail; for that, you’ll have to put in a homeowners insurance claim or pay out of pocket.

Given the gotchas, a warranty probably shouldn’t be your main focus in choosing a new roof. Rather, our testers recommend that you place your faith in a strong shingle and a reliable contractor. The right combination can help your home weather most storms without draining your wallet.

**Choose a Contractor**

With any roofer, get local references and check for local and state licenses, proof of bonding, Better Business Bureau rating, and active certificates of insurance—for liability and workers’ compensation. Your homeowners insurance company may also have a network of contractors.

If you have already decided on a shingle style, check the maker’s website for contractor recommendations. The company’s credentialed contractors, in theory, have more training in installing the product. In reality, a lot of that training focuses on sales, Graham says. “Nonetheless,” he says, “you
know that person is going to be a little bit more experienced.”

Look, too, for a contractor who has been around at least five years and has a good local reputation, Graham says.

**Get Multiple Estimates**

Ask about the quantity of shingles needed, labor charges, a description of the work to be done, approximate work dates, needed building permits, warranty details, and a payment schedule. The roofer typically orders the shingles and gives you the manufacturer documents; store those papers safely for future reference.

To activate a warranty upgrade, you may have to use a maker’s suite of shingles and other roofing components, such as flashing and underlayment (see our illustration of roof parts, below). But there’s another reason to bundle these products together, says Jerod Raisch, president of Metro Construction, a roofer based in Denver. “They’ve been tested together,” he says. “That consistency can give you better performance.”

**Compare Installers’ Warranties**

Some installers offer workmanship warranties separate and apart from a shingle manufacturer’s. Be sure to ask for one in writing. Among the dozens of contractor websites from across the country that we reviewed, only a few showed explicit warranties. The promises we found covered between one and 50 years, though experts told us most roof problems happen in the first couple of years. “If you don’t find a leak in the first two years, it’s probably not going to happen,” says Melissa Eiseman, president of Eiseman Construction in New Britain, Pa., which offers a five-year workmanship warranty. (Lowe’s offers a two-year workmanship warranty for roofs that its partner contractors install; Home Depot is exiting the business but still honoring existing contracts.)

**Take These Last Key Steps**

Contact your insurer once the work is done; some reduce premiums for new roofs. Register your warranty with the manufacturer if the contract requires it; even with its caveats, the document can have use down the road. And note whether it can be assumed by the second homeowner—a common feature that can be an attractive home-selling tool later on. Check the warranty for transfer requirements, which include strict deadlines.

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**ANATOMY OF A ROOF**

Before giving you an estimate, a contractor should assess all components in and around your roof, including the **drip edge** and gutters that steer water runoff. In a complete roof repair or redo, you’ll typically need to replace the **underlayment**. That component, usually treated paper or synthetic sheets, serves as a weather barrier atop the **decking**, the flat surface—typically plywood—that lies on rafters. In a cold climate, a roofer may suggest applying an **ice-dam protection membrane** in some areas to prevent ice dams that can cause water seepage. Adding or updating the **ridge vent** and **vented soffits** can improve attic airflow and prevent harmful moisture buildup. Replacing or fixing **flashing**, the material around the chimney and where roofing planes meet, can prevent leaks; ask about alternatives to copper, which is durable and pretty, but costly.
5 WAYS TO HELP YOUR ROOF LAST LONGER
One of the biggest factors that take a toll on your roof—the weather—is out of your control. But there are steps you can take to improve your roof’s longevity.

AVOID POWER-WASHING SHINGLES
Concentrated spray can loosen the granules from the products’ top coating—and resulting damage might not be covered by the warranty. Rather, have a professional use a broom or leaf blower, or manually remove dirt and moss. And don’t DIY. “We recommend homeowners use a professional for safety reasons,” says Don Huber, CR’s director of product safety.

CHECK YOUR VENTILATION
Inadequate or badly located attic soffits and vents can cause condensation on the plywood decking that supports your roof shingles, which can lead to rot. A poorly placed exhaust fan can do the same. “I can’t tell you how many times I go into places where the bathroom vents right into the attic and creates a problem,” says Melissa Eiseman, president of Eiseman Construction, a roofing company based in New Britain, Pa. That’s not something you can easily determine yourself. A contractor can check your system and suggest fixes, which could save you money and headaches later on.

CLEAN GUTTERS REGULARLY
“By doing so, you’ll prevent a buildup of water that could lead to leaks,” says Bobby Fischer, vice president of contractor programs at GAF, a shingle manufacturer. Fischer also recommends cutting back heavy tree limbs that might brush against and erode roofing materials.

INSULATE ATTICS AND CATHEDRAL CEILINGS PROPERLY
That helps prevent ice dams, which can lead to costly leaks, especially in areas where roofing planes meet. Lighting can have an impact, too. Normally, when the top layer of snow melts on your roof, it drips off. “But if the recessed lighting in your cathedral ceiling is poorly insulated, the heat can melt snow and ice from underneath; if trapped, that moisture can seep through nail holes and destroy the roof’s decking,” Eiseman says. To counter the effect, a roofer can install a self-adhesive membrane to protect against ice and water on select areas of the roof.

FORTIFY IT
In areas prone to hurricanes, tornados, or severe thunderstorm-related winds, consider spending extra for this three-stage treatment when you get a new roof. First, installers seal decking with special tape or sealant. Second, they use ring-shank nails, with ribbing that resists wind uplift. Third, they lock down the roof’s edges with metal flashing. Find a certified expert through the Insurance Institute for Business & Home Safety (iibhs.org). The upgrade adds about $700 to $1,200 to the cost of roofing a 1,500-square-foot home or about $1,500 to $2,000 extra for a 3,000-square-foot home, estimates Ian Giammanco, IBHS senior director of product design and lead research meteorologist. Your home insurance may give a discount for such fortified roofs, somewhat offsetting the cost.

Save the Planet (and Some Money)
Asphalt is an oil derivative, so if you want to reduce your carbon footprint as a roofing consumer, consider taking these three steps.

GO LIGHT Light colors reflect more of the sun’s energy than dark colors do. That means a lighter-colored roof will keep your home cooler in summer—saving you money on energy bills—by reflecting more sunlight, so less heat builds up inside, says Jeffrey Steuben, executive director of the Cool Roof Rating Council, a nonprofit based in Portland, Ore. A light roof will also be cooler in winter, but the extra heating cost usually doesn’t outweigh the summer air-conditioning savings, Steuben says. Want to lighten up? Check roofing ratings at coolroofs.org to identify products and colors with the highest “solar reflective index.”

RECYCLE OLD SHINGLES Ask your roofer to cart away your old asphalt shingles to a recycler where they’ll be ground up and used for road paving; it should cost you and the roofer little or nothing if the recycling center isn’t far. Go to shinglerecycling.org or cdrecycling.org to find recyclers in your state.

ADD SOLAR PANELS Tesla recently debuted an update of its solar panels that double as roofing shingles; GAF and CertainTeed are among makers selling solar panels that integrate with their shingles to produce a sleeker profile than that of traditional setups. Residential solar panels and roofs that produce electricity qualify for a federal tax credit worth 26 percent of total installation cost in 2020, and 22 percent in 2021. Your state may offer a credit, too.
Ratings  >  Shingle-Minded

Our asphalt roofing ratings reflect performance results for resistance to tearing, stretching, wind uplift, and falling objects.

<table>
<thead>
<tr>
<th>Brand + Model</th>
<th>Overall Score</th>
<th>Price</th>
<th>Weight [lb.]</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per 100 sq. ft.</td>
<td>Per 100 sq. ft.</td>
<td>Strength</td>
</tr>
<tr>
<td><strong>3-TAB SHINGLES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A roof using this single-layer shingle will lack a three-dimensional look, though some styles have variations in shading to simulate texture. Atlas StormMaster Slate is recommended; it scores particularly well for wind resistance.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Atlas StormMaster Slate</td>
<td>62</td>
<td>$140</td>
<td>230</td>
<td>1</td>
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<tr>
<td>GAF-Elk Royal Sovereign</td>
<td>52</td>
<td>$85</td>
<td>180</td>
<td>1</td>
</tr>
<tr>
<td>CertainTeed XT 25</td>
<td>41</td>
<td>$90</td>
<td>210</td>
<td>1</td>
</tr>
<tr>
<td><strong>ARCHITECTURAL LAMINATED SHINGLES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This style has some layering for strength and texture. Pricing in this category—for lower than for multilayered shingles—makes it an attractive option for the budget-minded. Owens Corning Duration alone earns a Very Good score, but three others are recommended for their generally good performance and competitive pricing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owens Corning Duration</td>
<td>64</td>
<td>$95</td>
<td>200</td>
<td>1</td>
</tr>
<tr>
<td>Tamko Heritage</td>
<td>60</td>
<td>$90</td>
<td>205</td>
<td>1</td>
</tr>
<tr>
<td>GAF-Elk Timberline Natural Shadow</td>
<td>60</td>
<td>$104</td>
<td>210</td>
<td>1</td>
</tr>
<tr>
<td>Atlas Pinnacle Pristine</td>
<td>60</td>
<td>$95</td>
<td>220</td>
<td>1</td>
</tr>
<tr>
<td>Iko Cambridge</td>
<td>58</td>
<td>$90</td>
<td>230</td>
<td>1</td>
</tr>
<tr>
<td>Owens Corning Oakridge</td>
<td>54</td>
<td>$90</td>
<td>200</td>
<td>1</td>
</tr>
<tr>
<td>CertainTeed Landmark Premium</td>
<td>54</td>
<td>$110</td>
<td>290</td>
<td>1</td>
</tr>
<tr>
<td>CertainTeed Landmark</td>
<td>53</td>
<td>$95</td>
<td>230</td>
<td>1</td>
</tr>
<tr>
<td><strong>MULTILAYERED ARCHITECTURAL LAMINATED SHINGLES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The many layers of this style can create an even more three-dimensional look than regular architectural laminated shingles. We found that more layers generally meant more strength and durability, too. Owens Corning Berkshire Collection and CertainTeed Presidential Shake earn Excellent Overall Scores.</td>
<td></td>
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</tr>
<tr>
<td>Owens Corning Berkshire Collection</td>
<td>92</td>
<td>$225</td>
<td>360</td>
<td>2</td>
</tr>
<tr>
<td>CertainTeed Presidential Shake</td>
<td>81</td>
<td>$325</td>
<td>350</td>
<td>2</td>
</tr>
<tr>
<td>Iko Crowne Slate</td>
<td>79</td>
<td>$180</td>
<td>220</td>
<td>2</td>
</tr>
<tr>
<td>CertainTeed Grand Manor</td>
<td>78</td>
<td>$295</td>
<td>415</td>
<td>2</td>
</tr>
</tbody>
</table>

**HOW WE TEST:**

*Weight* is in pounds per 100 square feet. *Strength* denotes flexibility and resistance to tearing, stretching, and weathering effects. *Wind* is how well a shingle’s adhesive resists wind lift; as a proxy we attempt to tear the shingles off their mountings by pulling up on the edges. *Nailing* measures how well a shingle resists being pulled through its fastener nails. *Impact* is resistance at 0°F to blows from a 5-pound weight. *Overall Score* is an evaluation of the overall resiliency of the shingle. *Price* is amount we paid per 100 square feet.

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**Icons:**

- Poor
- Excellent
- Recommended

**January 2020**

CR.org

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**CD Recycling:**

Customers can visit cdrecycling.org to find recyclers in their state.

**Add Solar Panels:**

Tesla recently debuted an update of its solar panels that double as roofing shingles; GAF and CertainTeed are among makers selling solar panels that integrate with their shingles to produce a sleeker profile than that of traditional setups. Residential solar panels and roofs that produce electricity qualify for a federal tax credit worth 26% of total installation cost in 2020, and 22% in 2021. Your state may offer a credit, too.
Sick of companies giving you the runaround when you have a problem with billing or product performance? Learn how to get your complaints taken seriously and solved quickly.

by Kevin Doyle
Illustrations by Jason Schneider
Bob Solomon was counting the hours until he could start counting sheep in the new queen-size bed he’d ordered from Amazon. “I’d cleared out the old mattress and box spring, and hand-waxed the bedroom’s parquet floor to prepare for the delivery,” says Solomon, a CR member and retired professor from Alberta, Canada. But on the day the bed was guaranteed to be delivered, it never showed up. At least not at his address. “From outside my house, I could see the box sitting at a neighbor’s, about a block away,” he says.

It was too heavy for Solomon to carry and too large to fit into his car, so he reached out to the shipping company, Purolator, by phone and email. “They kept insisting that their GPS coordinates showed the box was at my home, and that if I just stepped outside I would see it,” he recalls. “I told them I was standing outside and it wasn’t there. But they ignored me.”

More than 24 hours, 12 emails, and many phone calls later, the shipping company admitted its mistake. But even then it said it would take three more days to deliver the bed because it had to do a mandatory warehouse search first. “I told them, ‘This is crazy! This is illogical!’” Solomon says. “I felt so frustrated and ignored and mistreated that I canceled the order even though I really wanted the bed.” Amazon ultimately saved the day by delivering a new bed and extending Solomon’s Prime membership for his trouble. He was sleeping in his new bed two days later.

(Purolator told CR that it regrets the error and is reviewing its procedures to prevent this type of miscommunication in the future.) Consumers have been frustrated by dismissive, unfair, and otherwise unacceptable customer service since the dawn of commerce. One of the earliest recorded complaints was lodged in 1750 B.C. by a Babylonian demanding a refund from a merchant who sent him copper ingots of inferior quality. “What do you take me for, that you treat somebody like me with such contempt?” the unhappy customer asked in an entreaty that was engraved into a clay tablet but would not be out of place in one of today’s online product reviews.

People eventually put their complaints on paper, and then moved on to the telephone and email, but little else changed in the intervening 3,000 years. Now, however, social media and other forms of technology...
How to Make Twitter and Facebook Work Harder for You

How to Use It: You may be able to post directly on a company's Facebook page. You can also send a direct message by using the Send Message button under the cover photo. Posts will be visible to your friends and may appear in the company's timeline; direct messages will not be visible to anyone but the company. (To send messages from your phone, download the Facebook Messenger app.)

PRO: Chances are you're already using Facebook, so there's no learning curve.

CON: The company can hide feedback in its timeline without the poster knowing.

Keep in Mind: To maximize visibility, CR member Joey Davis recommends posting your query or complaint as a comment to an advertisement or other post from the brand. "I know the last thing a company wants on an ad meant to generate revenue is a testimonial from a user with problems," he says.

How to Use It: Most companies have public profile pages that are easy to find using Twitter's search function. You can tweet a message by clicking on the blue "tweet" button (or the feather icon) and typing into the pop-up that appears. (You're limited to 280 characters.)

PRO: Tweets can't be deleted by companies (other than their own), so they're generally considered to be more public than Facebook comments.

CON: Some may find Twitter less intuitive to use than Facebook.

Keep in Mind: After your initial tweet, companies will probably request that you communicate with them via direct messages. (These are hidden from public view and aren't limited to 280 characters.) In order to receive direct messages from a company, you need to "follow" it or activate the "receive messages from anyone" setting. (To do this, go to Direct Messages under the Privacy and Safety tab.)

Also, if you send a message to a company using the tweet button, it will appear only in the timelines of people who follow both you and the company. To make the tweet more public, don't begin the tweet with the name of the company. Instead, place it within a phrase in the tweet (e.g., I've been bumped by @OverbookedAir. Help!). The tweet will then appear in the timeline of everyone who follows you.

1. Beware of scam accounts. Some Facebook and Twitter accounts have names that sound like the customer service pages of large companies but are not. They may have been created by imposters to get sensitive information such as credit card numbers. Always look for a check mark next to the name of the account. It verifies that it's valid and was created by the company.

2. Target the right account. After you find an official account, make sure it's one the company actively monitors.

On Facebook: Read the "about" pane. If it says how long it takes for the company to respond, you'll know it monitors the page for feedback. (You can also click on the About link on the left side of the page, where companies often list the best way to contact them.) The response time may also be noted in the pop-up that appears when you click on the Send Message button. If the page doesn't have that button, the company may not monitor the page for comments.

On Twitter: Read the "bio" at the top of the page, which may say whether the account is monitored for questions and complaints and, if not, the correct account to contact. Also look at the Tweets & Replies tab to see how responsive the company is. Large companies that actively monitor Twitter may reply to customer tweets several times a minute. If you don't see replies, you may want to choose another way to contact the company.

3. Protect yourself. Don't post reservation numbers, telephone numbers, or other private or sensitive information on Facebook or Twitter pages. Sending them via the Send Message button or Messenger app on Facebook or by direct message (by clicking on the envelope icon) on Twitter is less risky but not without danger. "Any personal information you enter into social media has the potential to be exploited in ways you and the company didn't intend," says Cody Feng, a privacy researcher and tester at CR. Never, under any circumstance, send credit card information by social media.

4. Stick to the facts. Embellishing will diminish your credibility and could even expose you to legal action. Keep your complaint focused on the facts, and always provide documentation.

5. Keep your cool. Companies will have a record of your interactions and may be less inclined to be helpful if they see you've been abusive in the past. "Putting a company on the defensive makes it less likely to be collaborative," says CR member Jean-Luc Bourdon. "I always try to complain with grace and not to accuse them of bad behavior until the cause of the problem is clear."
are beginning to radically reshape the customer service landscape, giving consumers powerful new tools to solve problems and make themselves heard.

Consider the experience of Jean-Luc Bourdon, a financial planner in Santa Barbara, Calif. When the Hertz car he’d reserved at the airport in Tahiti wasn’t available and he was forced to rent from another company, he called Hertz customer service and spoke to an agent who said the company would get back to him within days. Not satisfied with that response, Bourdon tweeted a message to the Hertz social media team. It responded immediately and referred him to another department, which ultimately refunded the amount he requested and awarded him enough points for a complimentary rental. (A Hertz department, which ultimately responded immediately and referred him to another department, which ultimately refunded the amount he requested and awarded him enough points for a complimentary rental. (A Hertz spokesperson said that all of the company’s customer service agents are empowered to resolve any issue a customer may face.)

“My instinct is to call first because it can be a lot more efficient than back-and-forth messages over social media,” Bourdon says. “But when I really run into frustration, I find social media to be the best remedy.”

Apart from social media, companies are increasingly using other technologies to interact with customers. While some of these, such as web chats, have the potential to improve service, others are raising concerns about privacy and fairness, because they rely on data that may be inaccurate. (See “Paying With Our Privacy: When Technology Meets Customer Service,” on page 30.) With so many ways to reach out to companies—from calling to chatting to email to posting on Facebook and Twitter—it pays to know how they can work for you—and potentially against you.

Decades of Discontent
Consumers have had it. More than half of Americans report that they’ve had a problem with a product or service in the past year. Of those, more than half said they were extremely or very upset by the experience, and a third reported feeling anxious, betrayed, or sad about it, according to the 2017 Customer Rage Study, conducted biannually by the consulting firm Customer Care Measurement & Consulting (CCMC) and the W.P. Carey School of Business at Arizona State University. Moreover, the study found that only 18 percent of people who’ve complained about problems were completely satisfied with the action the company took to resolve them. That sorry satisfaction rate isn’t something new: It’s actually somewhat lower than the 22 percent of respondents who reported being completely satisfied 41 years ago.

Still, while the issues you might expect—waiting endlessly on hold, dealing with faulty voice recognition, jumping through hoops to cancel a service—are the source of many woes, experts say much of our present dissatisfaction stems from a complicated confluence of factors.

“Twenty years ago, a faucet was a chunk of metal that you expected...
Decades of Discontent

Experts say our discontent also may be linked in part to a handful of companies that have raised the customer service bar so high that we’ve come to expect a similar level of care from everyone we do business with. “Consumer expectations have risen because of the great personalized experiences companies like Netflix, Amazon, and Uber are delivering,” Leggett says. “So we’re no longer comparing the customer service we get from a financial institution to the ease and simplicity of returning a product from Amazon.”

When to Tweet, Post, or Chat

When a company lets us down, most consumers—particularly those 35 and older—turn to the phone, according to an annual survey by the information technology firm Dimension Data. In an informal poll conducted by CR on Facebook and Twitter, a large majority of respondents said they preferred to contact a company by phone when they had a complaint, while only a small fraction said social media was their first choice. “When you’re really angry, you want to talk to someone and convey your rage,” Goodman says. “On the phone, I can also tell from the agent’s voice if he’s really going to help me or not. That doesn’t come through via email or other nonverbal channels.”

Of course, calling can come with its own frustrations, including phone trees, an eternity spent on hold, and being pingponged from person to person. The Customer Rage Study found that people are referred to a different contact 75 percent of the time they reach out to a company to complain, with customer satisfaction dropping each time.

In the CR poll, an online chat was the second most popular way to reach a company, after the phone. It’s true that response times, especially for basic questions, may be much quicker using a web chat than contacting a company by phone or email, but none of the CR members or customer service experts we talked with said that chatting was any more effective.

Social media lagged far behind phone calls, email, and web chats for a vast majority of people in CR’s informal poll and the Dimension Data report. But it appears to be a powerful secret weapon when it comes to customer service, many experts and consumers say.

“Smart consumers know that if they contact a company on Twitter or Facebook, they’ll get a better response and a faster response than they will...
Paying With Our Privacy: When Technology Meets Customer Service

Companies are digging through your data to decide which agent you should talk with and maybe even how long to put you on hold. Here’s what you need to know.

### Customer Lifetime Value Score

**WHAT IT IS:** A measurement of a customer's potential financial value to a company based on data (some from surveys or third parties) including purchase and return history, demographics, and perhaps even web-browsing history. **WHY COMPANIES USE IT:** To retain high-value customers by, for instance, prioritizing their calls and offering them perks or white-glove service. “Businesses have always known who their best customers are,” says Sunil Gupta, a professor at Harvard Business School. “But the richness of the data available today lets a company know the value of every single customer.” **CR’S TAKE:** “These scores can rely on highly subjective data,” says Katie McInnis, a CR privacy policy counsel who focuses on technology. “They also factor in information including your ZIP code, which can be a proxy for income and race. People should not be getting inferior service because they earn less than others or because of any other factor used to determine this score.”

### Likely Behavioral Pairing

**WHAT IT IS:** A form of matchmaking that uses artificial intelligence to analyze a caller's billing history, demographic data, and previous interactions with customer service representatives to pair them with the agent they’re most likely to get along with. **WHY COMPANIES USE IT:** To increase profits and decrease cancellations. “By and large, behavior pairing results in customers spending more, retaining customers longer, and being happier,” says Chris Farmer, chief marketing officer of Afiniti, which provides this technology to companies. **CR’S TAKE:** The algorithms that run AI are only as good as the data used to create them, McInnis says. This is a new and fallible technology that could potentially result in negative outcomes for consumers.

### Chatbot Technology

**WHAT IT IS:** A type of AI that simulates human conversation. Most customer service chatbots respond to written communication, such as social media messaging and customer service instant messaging built into a company’s website. The technology is also being used more frequently for telephone interactions, such as to refill prescriptions. **WHY COMPANIES USE IT:** To improve a consumer's customer service experience and identify common problems that could affect the bottom line. **CR’S TAKE:** Although advancements have been made in this technology, recent studies confirm that it’s not foolproof. “Companies that use speech analytics must ensure that the technology does not misinterpret customers' accents or grammar in a way that could lead to unfair treatment,” McInnis says.

### Speech Analytics

**WHAT IT IS:** Technology that “listens” to customer service calls to identify trending topics, gauge the emotional state of customers, coach agents on how to talk with them, and identify knowledge gaps in customer service personnel. **WHY COMPANIES USE IT:** To improve efficiencies and identify common problems that could affect the bottom line. **CR’S TAKE:** Although advancements have been made in this technology, recent studies confirm that it’s not foolproof. “Companies that use speech analytics must ensure that the technology does not misinterpret customers’ accents or grammar in a way that could lead to unfair treatment,” McInnis says.

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if they call customer service,” says Sunil Gupta, co-chair of the Driving Digital Strategy executive program at Harvard Business School. “No one else knows when you call a company with a problem, but on social media a lot of people see the complaint, which is exactly what companies are worried about. It certainly is a way to get a company’s attention.”

**Why Social Media Succeeds**

Feedback from many CR members suggests that social media can be a highly effective way to resolve customer complaints, even when other approaches fail. When Lindsey Viscomi, a marketing executive from Vienna, Va., called JCPenney to sort out a billing problem, the company’s automated phone system told her she would be on hold for 45 minutes. She had a better idea. “I tweeted a message to JCPenney that their telephone wait time was nuts, and asked if someone could call me back,” Viscomi says. A representative quickly tweeted a reply and, after a few messages back and forth, the company credited her a refund. “I didn’t hang up the phone, because I
didn’t hang up the phone, because I company credited her a refund. “I a few messages back and forth, the quickly tweeted a reply and, after Viscomi says. A representative someone could call me back,” wait time was nuts, and asked if sage to JCPenney that their telephone would be on hold for 45 minutes. She was afraid to lose my place,” Viscomi says, “but the whole thing was resolved on Twitter in 20 minutes—before anyone ever answered my call.” Viscomi has also used Twitter to resolve problems with companies including CVS, Delta, Lyft, and Nordstrom. Like many CR members, she notes that a key advantage of using social media is that it frees her from the frustration of navigating phone trees and being put on hold. “Social media is public, so you get a lot of eyeballs on your complaint,” she says. “I feel like it kind of lights a fire under the company to get back to you.”

Eighty-four percent of consumers who posted complaints on social media used Facebook; 26 percent used Twitter, according to the Customer Rage Study. CR members reported success with both platforms, and typically used the one where they were active.

Joey Davis, a CR member and telecommunications worker from San Diego, has used both Facebook and Twitter for customer service and finds that Facebook has several advantages. “Facebook is so effective that it’s now my go-to, even before customer service chat,” Davis says. “I get a more immediate response from companies when I post on their Facebook page than I do when I contact them on Twitter, and the Facebook posts seem to get more comments and stay visible longer than tweets. I’ve also had product questions answered by other consumers on Facebook before the company ever got back to me. There’s almost always someone in the crowd who knows the answer.”

And there’s no doubt that having a massive social media following may help you get a company’s attention, as Kim Kardashian West did last May when she tweeted a complaint about the Jack in the Box chain to her 62 million followers. (The company responded within 24 minutes.) But given that none of the many CR members who have resolved problems using social media have celebrity-level followings, being well-connected can work to your advantage but is certainly not a requirement.

**How to Get Satisfaction**

Social media can be a powerful tool to resolve consumer problems, but it’s far from foolproof. Ali Cornford, an advertising executive who lives in New York City, is a frequent Twitter user who says she has had little success with customer service using that platform. “I find that companies usually reply very quickly with a generic apology and a request that you direct message them,” she says. (Direct messages on Twitter aren’t seen by anyone but the recipient.) “They want to quickly take it offline and away from public view, but then nothing happens. It leaves you with a false sense of hope.” Indeed, a growing number of companies use chatbot technology to automatically respond to messages on social media, which means that, in initial exchanges at least, you might not be communicating with a customer service representative at all.

But for some people, a response from a company through social media is good enough, even when the company isn’t able to resolve the problem. CR member Susan Kreusch turned to social media last year after her mobile phone suddenly stopped picking up a cellular signal inside her home. “I called AT&T four times over four or five days,” she says. “Each time the agent did nothing but take down my problem. That’s when I thought, ‘Forget this, I’m going on Facebook.’” Less than an hour after she sent a message, she received a reply from an AT&T customer service rep who gave Kreusch her direct number. Kreusch says it took more than a month to determine that the problem was with a transmission tower and couldn’t be remedied by the company. But she remains an AT&T customer because of the way it handled her complaint. “After contacting the company on Facebook, I got an immediate human response,” she says. “The agent continually kept me updated and would message me when she couldn’t reach me by phone. When I called, I didn’t have to listen to 99 options on an automated phone system. It was the epitome of customer service.”

An AT&T spokesperson said that customers can get questions answered or problems resolved by phone or through social media, an online chat, or the company’s website. “It’s our goal to provide the highest-quality experience regardless of how our customers engage with us,” she said.

As Jean-Luc Bourdon, the Santa Barbara financial planner, points out, sometimes just knowing you’ve been heard is satisfaction enough. “It used to be that when a company behaved badly, you either had to move on with a bad taste in your mouth or take legal action,” he says. “But social media empowers customers to demand to be treated as they should be. I find it comforting that there isn’t a place for really outrageously bad service to hide anymore.”
FROM WHOLE

DIFFERENT FOODS take turns being the dietary demon du jour, and currently, processed and “ultraprocessed” foods are the latest to come under the hot glare of scientific scrutiny. It’s certainly warranted. Research has linked ultraprocessed foods to a higher risk for obesity, heart disease, and cancer. Intriguing new work even suggests that they may actually encourage overeating, possibly because their particular mash-up of ingredients disrupts the hormones that control hunger, or it scrambles the gut-brain signals that tell us how much to eat. Some processing is relatively benign and even enhances healthy properties. But generally speaking, the farther your food gets from its original “whole” version, the less good it is for you. We’ve illustrated the journey of a few common foods from their least processed to their ultraprocessed forms to show you exactly where and how the nutritional degradation occurs.

BY JESSICA BRANCH

TOMATOES

Ideally, for the best taste you want a tomato that’s grown in your own backyard or at a nearby farm. Supermarket tomatoes are picked while they’re still green so that they don’t get overripe during the trip to the store. They might be refrigerated during transit to further delay ripening—which can also reduce flavor. Some are treated with ethylene, a plant hormone naturally found in tomatoes, to encourage even ripening.
CANNED TOMATOES

Picked at peak ripeness, tomatoes destined for canning are washed, prepared (peeled by means of steam or chemicals, then packed whole, diced, crushed, puréed, etc.), and put in liquid (usually water or tomato juice). The cans are heated to kill any bacteria, and then cooled. This processing actually makes lycopene (an antioxidant in tomatoes that’s linked to a lower incidence of heart disease, prostate cancer, and other diseases) easier to absorb. Additives may include salt, herbs and spices, citric acid, and calcium chloride.

TOMATO PASTA SAUCE

Like canned tomatoes, those used in jarred or canned sauce are harvested when ripe, then cooked down. Depending on the recipe, however, there may be a lot more than tomatoes in the jar—and not all of it healthy. In CR’s recent test of jarred sauces, about half contained 400 mg of sodium or more per half-cup serving. Many had added sugars, too.

KETCHUP

Typical ketchups, made largely of tomato concentrate plus sugars, salt, vinegar, and various spices, can pack a lot of sugar and sodium into a tiny serving. Heinz’s classic, for instance, lists tomato concentrate as its first ingredient, but its third and fourth are high-fructose corn syrup and corn syrup, followed by salt and natural flavoring. One tablespoon has 4 grams of sugars and 160 mg of sodium.
**WHEAT BERRIES**

These are whole-wheat kernels straight off the stalk with the husk removed. Boiling them—which is considered a form of processing—is an easy way to make them edible.

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**1. WHOLE-WHEAT PASTA**

Both regular and whole-wheat pasta are often made from durum wheat flour (which is higher in protein than some other types of flour), sometimes enriched with iron and B vitamins. But whole-wheat pasta is less processed because it’s made from whole-wheat durum flour, which means it retains the fiber and all of the other nutrients in the whole grain.

**2. 100% WHOLE-WHEAT BREAD**

The whole grain in this bread is whole wheat in flour form, and it’s an excellent source of fiber. Homemade bread may consist of little more than flour, yeast, water, and a bit of salt. But packaged whole-wheat breads may contain sugar, wheat gluten, preservatives such as calcium propionate (to prevent mold), and unspecified natural flavors.

**3. “WHEAT” OR “HONEY WHEAT” BREAD**

Wheat bread is most definitely not the same as whole-wheat bread. It may contain some whole-grain flour, but it’s primarily white bread. Made with mostly refined wheat flour, its often lengthy ingredients list may also include sugar, dough conditioners such as sodium, and stearoyl lactylate. A slice usually has just 1 gram of fiber; a whole-wheat slice has 2 to 3 grams.
By law, it must be entirely made from the type of poultry specified. Per the USDA’s preference (though not law), it should contain “whole muscle material” (drumsticks, thighs, necks, etc.), and other components, like skin and fat, should be present in “natural proportions.” Other animal parts, like giblets, should be excluded. If the label reads “ground chicken meat,” it can’t contain any skin, and ground chicken breast must be solely breast meat.

The meat and spice mixture that makes up sausage is often stuffed into a casing made from pork. Chicken sausage may have nitrates or nitrites added to prevent bacterial growth and give it color and flavor. These additives, even the natural-sounding “celery powder,” can convert into potentially carcinogenic nitrosamines. Plus, sodium levels tend to be very high.

This finger food usually consists primarily of breast meat (with or without rib meat) sometimes augmented by dark meat or skin for flavor and texture, and sometimes marinated for flavor. The meat is chopped and formed into “nugget” shapes, which are then seasoned, breaded (generally with refined flour), and fried, often with extra fat and sodium added along the way.

Usually what you see is what you get when you buy a whole bird or parts, but check the ingredients list. Some brands are plumped up with broth, salt, and various flavors (up to 3 percent by weight for bone-in and 8 percent for boneless). Once you take the chicken home, the seasoning and cooking you do is considered to be a type of processing.
PEANUTS IN THE SHELL

After the peanut plants are pulled out of the ground, they’re left to dry in the field for a few days. The peanuts are then removed from the vine and may be further dried under forced hot air. If salted, they have probably been soaked in a brine and dried again.
ROLLED OATS

Used for oatmeal, rolled oats are lightly processed to make them edible. The oat groats (grain kernels) are steamed, flattened, and dried. They still contain all three parts of the grain—the bran, germ, and endosperm—so they retain all of the fiber and other nutrients. (Even less processed are steel-cut oats, which are simply oat groats sliced into small pieces.) You can buy them with no added sugar, salt, or other ingredients.

INSTANT OATMEAL

To make oats “instant,” they’re pressed thinner and steamed longer than rolled oats. They’re still a whole grain but can be digested more quickly, which may potentially lead to spikes in blood sugar levels. This processing is light, but more processed versions add sugars, flavorings, and preservatives.

HONEY NUT OAT O’S CEREALS

Whether name-brand or generic, these healthy-sounding cereals are highly processed. Though the main ingredient is whole oat flour, some may contain three or more forms of sugar, such as sugar, honey, and brown-sugar syrup. Other additives may include salt, oils, and vitamin E as a preservative. Still more egregious, there may be no actual nuts, only “natural almond flavor.”

OATMEAL-RAISIN COOKIES

The typical packaged cookies are likely to be made primarily with white wheat flour rather than whole oats, and may contain processed ingredients you probably wouldn’t include if you were making them from scratch, such as hydrogenated oil, high-fructose corn syrup, whey protein concentrate, and soy lecithin.
As prescription drug costs continue their meteoric rise largely unchecked, people are being driven to the financial brink. Here’s why prices keep going up, plus how to combat the sticker shock—and still protect your health.

BY LISA L. GILL
DIABETES

OVER THE PAST SIX YEARS, A MONTH’S SUPPLY OF LANTUS, AN INSULIN DRUG, HAS GONE UP 24 PERCENT.

Source: Research division of GoodRx (average cash price)
MICHELLE DEHETRE, a 48-year-old mother of five, had to pull over while driving last March and be taken to the emergency room when her blood sugar dropped too low. One reason for that dangerous decline: The Lewiston, Maine, resident had cut back on her diabetes meds, unable to afford the $300 per month that her treatment would cost, even with insurance.

And Tameka Woodard, 42, a medical assistant from Aberdeen, N.C., moved in with her mother last February so that she could afford medications for high blood pressure, depression, anxiety, and diabetes. Even with insurance, just one of her drugs costs more than $900 per month. “I have insurance, but my medications aren’t covered,” Woodard says.

Their stories are not uncommon. “High drug prices are financially toxic for American workers,” says Stacie B. Dusetzina, Ph.D., associate professor of health policy at the Vanderbilt University School of Medicine in Nashville, Tenn., and co-author of a 2017 report on drug costs by the National Academies of Sciences, Engineering, and Medicine.

A new Consumer Reports survey backs that up. Thirty percent of Americans who currently take prescription medicine say their out-of-pocket cost for a drug they regularly take has increased in the past year, according to CR’s September 2019 nationally representative survey of 1,015 U.S. adults. Of those, 12 percent say their drug costs went up by $100 or more. And those who saw spikes in their out-of-pocket costs were almost twice as likely to not fill a prescription, forgo other medical treatments or tests, cut back on groceries, or get a second job.

One contributing factor: No federal law or regulation effectively keeps drug prices in check. The heads of seven leading drug companies testified before the U.S. Senate last February, often justifying their high drug prices by pointing to the billions of dollars it takes to develop new medications. When pressed by senators, the industry executives said drug costs could be controlled only if the entire payment system was reformed.

Indeed, to pin all the blame on Big
BLOOD CLOTS
A MONTH'S SUPPLY OF XARELTO, A WIDELY ADVERTISED DRUG, HAS GONE UP 54 PERCENT OVER THE PAST SIX YEARS.

Their stories are not uncommon. "High drug prices are financially toxic for American workers," says Stacie B. Dusetzina, Ph.D., associate professor of health policy at the Vanderbilt University School of Medicine in Nashville, Tenn., and co-author of a 2017 report on drug costs by the National Academies of Sciences, Engineering, and Medicine.

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Source: Research division of GoodRx (average cash price).
Pharma is an oversimplification. How much a consumer pays for meds is also driven in part by drug supply system middlemen whose wheeling and dealing with drugmakers contributes to rising drug costs, according to multiple government reports and industry experts. Shrinking insurance coverage is another part of the problem, with greater numbers of Americans paying a larger share or even the full price of their medication.

For example, Bryan Lumpkin, a 40-year-old from Valley, Ala., recently took a second job as a paramedic, hoping to make enough money to pay for Epidiolex, a drug that Lumpkin says would cost him $2,336 per month and that his son needs to treat seizures—but is not covered by his insurance. “Even if we had been covered, we would have had to meet a $2,000 deductible, then pay $200 every month for refills,” Lumpkin says.

And there’s no sign of price increases slowing down, even as politicians from both sides of the aisle call for relief. At least 50 separate pieces of legislation that seek to control prescription drug prices were introduced in the Senate and the U.S. House of Representatives in 2019. Some would help to get generic drugs to market faster. Others would legalize buying drugs from Canada or allow the feds to negotiate with drug companies to get lower prices for Medicare. But not one of these has been signed into law. (For CR’s stance on some of these, see “Building a Better World, Together,” on page 7.)

And while “Medicare for All”—or expanding the government’s healthcare program to everyone—has become a common refrain in the current presidential campaign, it’s unclear what effect, if any, it would have on drug prices.

Meanwhile, consumers remain caught in the middle. Here, we take a closer look at three complex, hidden forces that contribute to ballooning drug costs, and explain how you can pay less for your meds.

### MIDDLEMEN MAKING MONEY

Although public anger over high drug prices often focuses on drugmakers, there’s a middleman who plays a role, too. Pharmacy benefit managers, or PBMs, work under contract with health insurance companies to create a “formulary,” a list of drugs the plan agrees to cover, says Neeraj Sood, Ph.D., at the USC Leonard D. Schaeffer Center for Health Policy and Economics in Los Angeles. PBMs also manage prescription drug claims for insurance companies.

Drugmakers who want to get their drugs on a PBM’s formulary so that insured people will choose them offer the PBM what’s known as rebate

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**Anatomy of a Drug Price: Humira**

In recent years, the full list price for Humira—an arthritis drug—has jumped, in part as middlemen in the drug supply chain called pharmacy benefit managers have taken a bigger cut. As a result, the cost to consumers—who often have to pay 30 percent of the drug’s list price as coinsurance—has also risen sharply.

<table>
<thead>
<tr>
<th>LIST PRICE</th>
<th>WHO MAKES THE MONEY</th>
<th>WHAT THE PATIENT PAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,914 2014</td>
<td>$2,623</td>
<td>$291</td>
</tr>
<tr>
<td></td>
<td><strong>DRUG COMPANY AND OTHERS</strong></td>
<td><strong>PHARMACY BENEFIT MANAGERS</strong></td>
</tr>
<tr>
<td></td>
<td>▲ 18% increase</td>
<td>▲ 611% increase</td>
</tr>
<tr>
<td>$5,174 2019</td>
<td>$3,104</td>
<td>$2,070</td>
</tr>
<tr>
<td></td>
<td><strong>COINSURANCE 30% OF LIST PRICE</strong></td>
<td><strong>$874</strong></td>
</tr>
<tr>
<td></td>
<td>▲ 78% increase</td>
<td>▲ 611% increase</td>
</tr>
</tbody>
</table>

Sources: GoodRx (Humira list prices). Other figures estimated based on Credit Suisse 2015 Global Pharma Report; Feb. 26, 2019, testimony to U.S. Senate Committee on Finance; and drug pricing experts.
ALLERGIES
A TWO-PACK OF EPIPEN JR, USED TO TREAT LIFE-THREATENING ALLERGIC REACTIONS, INCREASED 52 PERCENT OVER THE PAST SIX YEARS.

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$458</td>
</tr>
<tr>
<td>2015</td>
<td>$561</td>
</tr>
<tr>
<td>2016</td>
<td>$561</td>
</tr>
<tr>
<td>2017</td>
<td>$687</td>
</tr>
<tr>
<td>2018</td>
<td>$690</td>
</tr>
<tr>
<td>2019</td>
<td>$713</td>
</tr>
<tr>
<td>2019</td>
<td>$697</td>
</tr>
</tbody>
</table>

Source: Research division of GoodRx (average cash price).
When Drug Costs Rise…

Cutting back on groceries, delaying paying other bills, even rationing their own healthcare in potentially dangerous ways—these are some measures Americans have been forced to take when their drug prices rise, according to a CR survey of 1,015 American adults currently taking prescription drugs.

**HEALTHCARE CHANGES**

**PEOPLE WHO HAD AN OUT-OF-POCKET DRUG PRICE INCREASE IN THE PAST 12 MONTHS WERE MORE LIKELY THAN THOSE WITHOUT INCREASES TO TAKE THESE COST-SAVING STEPS.**

<table>
<thead>
<tr>
<th>healthcare change</th>
<th>people who had an increase vs people without increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not fill a prescription</td>
<td>23% vs 9%</td>
</tr>
<tr>
<td>Did not take a prescription as scheduled*</td>
<td>12% vs 8%</td>
</tr>
<tr>
<td>Declined a medical test or procedure</td>
<td>13% vs 7%</td>
</tr>
<tr>
<td>Took an expired medication</td>
<td>14% vs 7%</td>
</tr>
<tr>
<td>Swapped an expensive Rx drug for a non-Rx option*</td>
<td>10% vs 8%</td>
</tr>
</tbody>
</table>

**HOUSEHOLD CHANGES**

**PEOPLE WHO HAD AN OUT-OF-POCKET DRUG PRICE INCREASE IN THE PAST 12 MONTHS WERE MORE LIKELY THAN THOSE WITHOUT INCREASES TO TAKE THESE STEPS TO PAY FOR THEIR MEDICATION.**

<table>
<thead>
<tr>
<th>household change</th>
<th>people who had an increase vs people without increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spent less on entertainment and dining out</td>
<td>34% vs 13%</td>
</tr>
<tr>
<td>Spent less on groceries</td>
<td>22% vs 11%</td>
</tr>
<tr>
<td>Spent less on family</td>
<td>19% vs 8%</td>
</tr>
<tr>
<td>Postponed paying other bills</td>
<td>17% vs 7%</td>
</tr>
<tr>
<td>Took a second job</td>
<td>5% vs 2%</td>
</tr>
</tbody>
</table>

Source: Consumer Reports nationally representative survey of 1,015 U.S. adults who currently take prescription medication, 302 of whom experienced a cost increase in at least one drug in the previous 12 months and 585 who did not (26 were unsure, and two didn’t respond). *Not statistically significant.
payments, Sood says. As consumers fill prescriptions, drug companies issue these rebates. Some of that money stays in the PBM’s pocket, while some goes to other players in the prescription drug supply chain, notably insurers, including Medicaid and Medicare plans.

In other industries, that might be considered an illegal kickback. But in the early 1990s, the Department of Health and Human Services (HHS), authorized by Congress, wrote an exception for these rebate payments to federal anti-kickback laws. That allowed drug companies to use the payments as a negotiating tool, according to Stephen Schondelmeyer, Pharm.D., a professor of pharmacoconomics at the University of Minnesota in Minneapolis.

PBMs have long had a lot of power over what consumers pay for drugs. And a consolidation of the industry over the past several years has made that even more true. Now just three dominate: CVS Caremark, Express Scripts, and OptumRx. In total, they cover more than 150 million people. That allows PBMs to be more aggressive when negotiating with drug manufacturers, demanding higher rebates, Sood says.

Those payments and other discounts doubled over five years, from an estimated $83 billion in 2013 to $166 billion in 2018, according to figures from Adam Fein, an industry consultant and drug pricing expert at the Drug Channels Institute, a research firm.

The Pharmaceutical Care Management Association, which represents PBMs, says its research shows that rebates are not responsible for drug price increases and, in fact, help keep premiums low for consumers.

America’s Health Insurance Plans (AHIP), which represents insurers, also says that rebates are a necessary tool that allows insurers to negotiate “with drugmakers for lower consumer costs.”

But the problem for consumers is that this system pushes a drug’s full, or list, price—like a car's sticker price—higher, as drug companies seek financial wiggle room to provide larger rebates to the PBMs, according to a May 2018 report by HHS. So while the rebate system might keep some overall costs in check, it could be at the expense of individual patients who need expensive drugs.

One dramatic example: Humira, a rheumatoid arthritis drug from the pharmaceutical company AbbVie. Since 2014, the amount that the company must pay to PBMs increased sharply—about 600 percent. That helped push Humira’s list price up 78 percent. (See “Anatomy of a Drug Price: Humira,” on page 42.) AbbVie did not respond to requests for comment.

How to address the drug cost problems caused by the rebate system? HHS has proposed eliminating the system entirely for Medicare Part D plans and possibly for commercial plans—an idea PBMs have criticized and...
HHS has reportedly dropped.

Another possible fix: Change the way PBMs are paid, to remove incentives that make drug prices artificially high. That’s a proposal from the Pharmaceutical Research and Manufacturers of America (PhRMA), which represents drug companies. It suggests that PBMs get a flat fee for the work they do instead of a negotiated rebate payment, according to Holly Campbell, a PhRMA spokesperson. “This can make the system work better for patients,” she says.

**SHRINKING INSURANCE**

Until recently, consumers with insurance typically paid a flat copay of $10, $25, or $40 for a drug. So the full price of a medication didn’t matter much, because most people never paid it, says Dusetzina at Vanderbilt.

But that’s changing. As more expensive drugs enter the market, and as drug prices have risen, insurers have come up with a new way to require patients to pay a larger share of the cost and for insurers to pay less: coinsurance. Instead of a flat copay, a consumer’s cost for these drugs is now often calculated as a percentage, typically 20 to 30 percent, of the drug’s full price, Dusetzina says.

About a third to half of people in commercial plans are charged using a coinsurance percentage for certain drugs, Fein says. That compares with just 3 percent of people enrolled in these plans in 2004. Depending on the drug, a person could be on the hook for hundred dollars or more per month.

To illustrate, consider Humira again. The list price for a month’s supply is now $5,174, compared with $2,914 in 2014, according to GoodRx, a company that tracks retail prices for prescription drugs. So people with 30 percent coinsurance would pay $1,552 every month out of pocket—$678 more than just a few years ago.

To make matters worse, the coinsurance payment is typically based on the drug’s full list price, not the discounted price that the PBM negotiates for insurers, says Stephen Buck, an industry consultant and a former executive of McKesson, a drug wholesaler. He thinks it would be fairer if a consumer’s coinsurance share was based on the discounted price. And at least two pieces of legislation now in Congress would require insurers to do just that. In the case of Humira, that could lower a person’s coinsurance payment by more than $600 per month, or $7,000 per year.

Another way to lower the cost of expensive drugs would be to share the rebate with patients as they fill prescriptions. Campbell at PhRMA says that “could save commercially insured patients with high deductibles and

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**Should You Order Rx Meds From Outside the U.S.?**

Americans spend more per capita for their medications than people in any similar country. So it’s not surprising that many people look overseas to fill prescriptions. In a September 2019 nationally representative CR survey, an estimated 3.7 million U.S. adults who currently take prescription drugs ordered meds from abroad in the previous 12 months.

To be sure, the savings can be substantial: For example, Canadians pay 56 percent less for drugs, on average, according to a 2019 analysis from the Kellogg School of Management at Northwestern University in Evanston, Ill. But there are several problems. While the law is seldom enforced, ordering drugs from abroad—or even hopping over the border to buy them to bring home—is usually illegal. (Exceptions include, for example, drugs for serious conditions that aren’t available in the U.S.) The Food and Drug Administration says it can’t vouch for the safety or effectiveness of any drug produced outside of its regulatory authority.

Indeed, the vast majority of online pharmacies that claim to be located in Canada actually operate from elsewhere and ship drugs from India, Turkey, or other countries where many counterfeit or adulterated drugs are available, according to a 2017 analysis by the National Association of Boards of Pharmacy, an independent group that represents pharmacy boards in all U.S. states and Canadian provinces.

In that analysis, 95 of the 100 online pharmacies it looked at operate outside of U.S. state and federal laws—meaning they, for...
coinsurance more than $800 annually and would increase premiums by 1 percent or less.”

**STeeper DEDuctibles**

High-deductible plans, which have lower premiums but require consumers to pay more out of pocket before insurance kicks in, became popular in the early 2000s as employers tried to slow the growth of premiums, says Schondelmeyer at the University of Minnesota. Almost half of Americans under age 65 with private insurance are now in these plans, up from 16 percent in 2008, according to the Centers for Disease Control and Prevention.

Insurers often cover a person’s drug costs without them having to meet a deductible. But a growing number of plans—now 44 percent—require a person to first meet a deductible, either combined with their medical benefit or as a separate drug deductible, according to the Pharmacy Benefit Management Institute, a research group. And until they do meet the deductible, consumers often must pay the full cost for the drugs—not a flat copay or coinsurance.

AHIP says higher deductibles are needed to cover the rising cost of drugs and healthcare overall in this U.S.

But those increased deductibles can strain budgets for many Americans. An employee with a family in a high-deductible plan pays an average of $4,250 before drug coverage starts, according to the PBMI. That’s almost four weeks of pay for the average worker. What’s more, the deductible is rising, according to another report by the Kaiser Family Foundation. It found that between 2010 and 2015, the average annual deductible for workers with health insurance increased 67 percent.

About a quarter of employers have

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**3 IN 10**

U.S. adults who take an Rx drug, or 56 million people, saw their drug costs go up in the past 12 months, according to CR’s survey.

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**The Cost of a 90-Day Supply of 3 Common Drugs**

<table>
<thead>
<tr>
<th>Drug</th>
<th>U.S.</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIFFERIN (FOR ACNE)</td>
<td>$226</td>
<td>$118</td>
</tr>
<tr>
<td>SYMBICORT (FOR ASTHMA)</td>
<td>$990</td>
<td>$126</td>
</tr>
<tr>
<td>FORTEO (FOR OSTEOPOROSIS)</td>
<td>$9,814</td>
<td>$2,348</td>
</tr>
</tbody>
</table>

Sources: GoodRx (U.S. prices), November 2019; Alberta College of Family Physicians (Canadian prices, converted to U.S. dollars), February 2019.
try to soften the blow by limiting how much more people in high-deductible plans must pay for healthcare after they reach their deductible, according to the PBMI. The average amount for these so-called out-of-pocket maximums is $5,380 for a family or $2,699 for an individual.

“Even if insured, consumers facing a life-threatening condition or a costly disease who don’t have an out-of-pocket maximum could be bankrupted by medical bills,” says Dena Mendelsohn, senior policy counsel at CR. “Out-of-pocket maximums protect consumers from debilitating medical bills so they can focus on their care.”

**HOW TO LOWER YOUR DRUG COSTS**

Although the behind-the-scenes forces that drive up drug prices trace back to the problematic way healthcare is delivered and paid for in this country, that doesn’t mean you’re powerless. Here are several steps you can take to make your meds more affordable.

**WITH YOUR DOCTOR**

**Request generics.** When a doctor recommends a prescription drug, ask whether a generic version is available. Most brand-name drugs have generic equivalents, and these generics can be up to 90 percent cheaper, Schondelmeyer says.

**Look for other treatments.** If there is no generic version, ask your doctor whether there is another drug, perhaps older but still tried-and-true, to try first. About 70 percent of expensive drugs have alternatives, Schondelmeyer says. For example, people who need a blood thinner may be prescribed Eliquis or Xarelto, both of which cost about $550 per month. But an older drug, warfarin, retails for about $19 per month and might be an option for you. Doctors often don’t ask patients about their ability to afford treatment, according to a 2019 physician survey in the Annals of Internal Medicine, so you might have to initiate the conversation.

**Ask about over-the-counter options.** Certain new, pricey medications are actually combinations of two older, inexpensive drugs, some you can buy without a prescription. Consider Duexis, used to treat arthritis and prevent stomach ulcers. It has a list price as high as $2,601 on GoodRx. But Duexis is simply two over-the-counter drugs, ibuprofen and famotidine, combined into one pill. The two, separately, could be purchased without a prescription for less than $19. Always check with your physician before changing your medication.

**WHEN PICKING UP YOUR DRUGS**

**Talk with your pharmacist.** If you get to the pharmacy counter only to be shocked by the price of your medication, ask the pharmacist whether there’s a way to make it more affordable. CR’s secret shoppers have found that pharmacists can often find discounts or in-store deals. They can also contact your physician to change the prescription to a lower-cost alternative when appropriate, Schondelmeyer says.

**Use manufacturer discounts.** Many drugmakers offer some type of discount, especially for expensive drugs, to help lower out-of-pocket costs, says Rich Sagall, M.D., president of NeedyMeds, a nonprofit that connects consumers with discount programs. These can help if the drug has a steep copay, is subject to coinsurance, or isn’t covered by your insurer. For example, Janssen, which makes Xarelto, offers a discount that can bring the price down to as little as $10. You can find an up-to-date list of drugmaker discounts at needymeds.org.

Note that details vary from program to program. For example, in some cases only the amount you pay out of pocket may go to your deductible, not the coupon’s full value, Buck says. So if you have a $100 copay and the coupon covers $90, only $10 is credited to your deductible. That’s an unwelcome change compared with two years ago, when the full coupon could have gone toward your deductible, Buck says.

**Look for patient assistance programs.** Sagall suggests checking with the drugmaker to see whether you qualify for an income-based patient assistance program. Some companies have recently raised the cutoffs on these programs to as high as $100,000. Note that you might not be eligible if you have insurance or are enrolled in Medicare or Medicaid, Sagall says. But check anyway, because programs differ and often change. NeedyMeds lists these programs, too.

**WHEN BUYING INSURANCE**

**Choose insurance plans carefully.** Some employers are now offering more low-deductible options, Schondelmeyer says. Though these plans have higher premiums, they can be good choices, especially if you or someone in your family regularly takes expensive drugs.

**Consider opening a health savings account.** If you’re stuck with a high-deductible plan, ease the pain by opening a health savings account. It lets you save pretax money for qualified health expenses, including prescriptions. An individual can deposit up to $3,550 per year and a family $7,100 into these accounts. Unused funds from one year roll over into the next. Many employers who offer high-deductible plans also provide an HSA option—some even help fund it. But if your employer doesn’t, you can open one on your own with a bank, a credit union, an insurer, or an investment company. To qualify, your deductible must be a minimum of $1,400 for an individual or $2,800 for a family.
DASHBOARD DECODER

What Does This Icon Mean?

- CROSSWALK ALERT
- ADAPTIVE CRUISE CONTROL
- WARP SPEED, CAPTAIN!
- LOCOMOTIVE MODE

Adaptive cruise control (ACC) automatically accelerates or brakes to keep your vehicle at a preset speed and/or distance from vehicles ahead of you. Some systems may bring the car to a full stop, then re-accelerate. Eighty-six percent of CR members say they are satisfied with ACC, and 16 percent say it helped them avoid a crash.

ASK OUR EXPERTS

What’s the best way to charge my phone in the car?

If you wirelessly connect your phone to your car with Bluetooth, plugging it into the USB port to charge it can cause the infotainment system to play selections from the phone’s music library at random. Instead of using the USB port, charge your phone with an adaptor that plugs into the 12-volt accessory socket or with a cell-phone mount that has a built-in wireless charger (assuming your phone supports wireless charging). You’ll have a more reliable connection, be less distracted, and will have to listen only to the music you choose.

THE VITAL STATISTIC

65%

Percentage of prospective American car buyers who say reliability is an extremely important factor when buying a car. Reliability tops the list of considerations for new-car buyers, exceeding even safety as a priority. Less than half (45 percent) say that a car that protects them in a crash is an extremely important consideration.


RECALL

Subaru Forester

Subaru is recalling more than 360,000 Forester SUVs because the front-passenger airbag may deactivate even if the seat is occupied. This recall affects only Foresters with heated seats from model years 2015-2018.

What to do: Subaru dealers will remedy the problem free of charge. Contact Subaru Customer Service at 844-373-6614. Subaru’s number for this recall is WUM-98.

TRENDS

The High Toll of Idling

Eliminating unnecessary engine idling of personal vehicles would reduce as many emissions and save as much fuel as taking 5 million vehicles off U.S. roads. You can reduce idling by not using remote starters or drive-thru windows. The stop/start feature on many autos cuts the engine when you stop and restarts it when you release the brake.

Sources: U.S. Department of Energy and Alternative Fuels Data Center.

The 29 states and the District of Columbia (in blue) that have laws regulating the idling of cars, trucks, and/or buses.


ILLUSTRATIONS BY MATTHEW HOLLISTER

JANUARY 2020 CR.ORG 49
Why It Pays to Wait

Snapping up a brand-new model in year one is exciting, but it can often result in more headaches than happiness. Our exclusive survey of CR members can steer you to a choice you won’t regret.

by Jonathan Linkov

OR CAR LOVERS, a dealership showroom can evoke that proverbial “kid in a candy store” feeling, as you ogle the high-sheen brand-new models, dripping with cutting-edge technology. Not to be a buzzkill, but we’re here to advise you to resist, and instead consider a model that’s several years into its redesign life.

Why? CR proprietary analysis shows that vehicles tend to be most reliable by the final year of any particular model run (typically five to seven years), after many of the bugs have been worked out, and least reliable in the first year of a redesign, when freshly reconfigured and often touted as “all-new.”

“It’s tempting to want to be the first on your block to have the newest car, but that comes with reliability risks,” says Jake Fisher, CR’s senior director of auto testing. “Being patient can save you from years of frustration.”

When a model is redesigned, the name, such as Chevrolet Malibu or Toyota Camry, usually stays the same but the body, transmission, engine, and other parts might get updates. It may be safer and have desirable features, but with those changes come hiccups or malfunctions, which automakers track through customer complaints and address through updates, recalls, or revisions to how they build the model. In this way, the vehicle matures into improved reliability, making it a choice that consumers can have more confidence about buying. In general, we found that it can take automakers two
The percentage of new or redesigned vehicles in our 2019 survey with below-average predicted reliability; 33 percent had above-average predictions, and 22 percent were average.

45%

The percentage of new or redesigned vehicles in our 2019 survey with below-average predicted reliability; 33 percent had above-average predictions, and 22 percent were average.

to three years—or even longer—to address problems in newly redesigned models.

For example, in 2017 CR members reported the Honda Odyssey as reliable. But they reported multiple problems after its 2018 redesign, mainly with the infotainment system and power equipment, causing the minivan to lose its recommendation. The problems have persisted with the 2019 model.

Some automakers can resolve the headaches quickly. The 2018 Tesla Model 3 has suffered from problems including cracks in the rear window glass, loose trim, and paint defects. Members reported far fewer of these concerns with the 2019 Model 3.

Our latest survey shows that fewer members reported those problems, and the sedan now has average predicted reliability—regaining its CR recommendation.

Still, there are brands, such as Toyota and Lexus, that often have fewer glitches with their redesigns. The redesigned 2019 Toyota Avalon and Lexus ES both had well-above-average first-year reliability.
DESPITE TERMINOLOGY used in ads from manufacturers, any given car, minivan, SUV, or truck isn’t “all-new” every year. In fact, sometimes it isn’t any different from the year before. However, during a model’s five- to seven-year life, before it’s updated entirely, there may be changes. The terms below explain the different types of changes.

FRESHENING This refers to minor updates that can occur in the middle of an existing model’s production run, often done to drive up consumer interest. Sometimes this means styling tweaks—such as a new grille or headlight design, or new paint color and interior color combinations. In other cases, the model might get an updated engine or transmission and/or an updated infotainment system. These keep the model competitive but avoid the huge costs of a full-on redesign. For example, the Audi Q7’s freshening for the 2020 model year incorporates a new infotainment system, engine, and styling details.

REDESIGN These are updated versions of a model that has been sold for at least one generation. For example, the Mercedes-Benz GLE and Ford Explorer are existing models that were completely redesigned for 2020. These will often have new engines, transmissions, suspensions, advanced safety systems, and interior design. Some redesigns will incrementally grow or shrink the size of the car. The more extensive or complicated the redesign, the higher the risk of reliability problems. Some redesigns are the basis for future models. For example, the redesigned 2017 Subaru Impreza had extensive problems with in-car electronics, such as the backup camera. Subaru addressed the concerns and incorporated the fixes into the redesigned 2018 Crosstrek SUV, which uses most of the same parts as the Impreza. That model didn’t have those problems.

ALL-NEW When properly used, this term denotes a debut model, never built before, or one reintroduced after having been taken off the market for years, such as the Toyota Supra. Other recent examples of all-new models include the Audi E-Tron, Kia Telluride, and Cadillac XT6. Some all-new models might share some major components with an existing model, such as the Cadillac XT6 and GMC Acadia SUVs. These can have fewer problems, because some bugs already have been identified and sorted out.

CR buys and tests nearly every all-new and redesigned model. We may test a freshened model if there are significant changes, such as a new engine and transmission.
These data show the BMW X3’s rocky reliability ride after a redesign. The SUV was redesigned in 2011, and it took until the 2016 model to work out the bugs. It was redesigned again for 2018. The X3 suffered from first-year flaws, and that model year continues to have well-below-average reliability. The data show that the automaker was able to quickly address the flaws of the first-year model so that they didn’t plague the 2019 X3, which has above-average reliability.
How a Redesign Can Drag Down Reliability

According to CR’s latest surveys, owners tend to have the best experience with the car, minivan, SUV, or truck they bought when it was close to the end of the model’s production run. Those who opted for the first- or even second-year redesigned versions were likely to have to deal with more problems. Below, to illustrate the point, we highlight six 2018 models that earned average or better reliability scores in last year’s survey, then after a 2019 redesign, suffered a drop to average or below-average reliability.

ACURA RDX

Trouble Areas: Owners reported problems with the RDX’s infotainment system, particularly the display screen freezing. Other problem areas include the navigation system, phone pairing, trim pieces falling off, premature wearing down of brakes, and squeaks and rattles.

BMW X5

Trouble Areas: Technology problems plague the X5, including the touch-sensitive pads on the external door handles failing to work and paired phones randomly resetting. One owner reported the BMW logo falling off the SUV.

CHEVROLET SILVERADO/GMC SIERRA 1500

Trouble Areas: Some minor transmission problems for the Silverado/Sierra twins, with members reporting rough shifting. Members said the infotainment system and dash display screens can go blank.

HYUNDAI SANTA FE

Trouble Areas: Some transmission problems; rough shifting; broken sunroof brackets; infotainment system regularly reboots.

SUBARU FORESTER

Trouble Areas: In-car electronics problems, including the radio not working but restarting the next day and the infotainment screen freezing; power liftgate problems; leaking air conditioning refrigerant; vibrations and rattles in the dash.

TOYOTA RAV4

Trouble Areas: Minor transmission headaches; rough shifting in low gears; squeaks and rattles (particularly for the RAV4 Hybrid); fuel pump problems; computer modules that would not save seat memory settings.
### 2020 ALL-NEW & REDESIGNED MODELS

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CR’s auto statisticians calculate reliability ratings for every major mainstream car, SUV, and truck on the market, even ones that are brand-new, just redesigned, or that we don’t have sufficient data for. We do this by analyzing annual CR member survey data on a model’s reliability history, the brand’s overall reliability, and if applicable, the reliability of models that use some of the same components. 2020 models with an asterisk (*) are new or redesigned.
The consistently reliable models built by Lexus, Mazda, and Toyota put them at the top of our annual auto reliability brand rankings. This year, some traditionally lower-scoring brands show improvement. Chrysler, Dodge, Infiniti, and Mini all moved up, primarily due to few redesigns in their shrinking model lineups, as well as average or better reliability of their older models that no longer have new-model bugs to work out. Some models, such as the Infiniti QX60 SUV, had below-average reliability when they first went on sale in 2013 but now are benefiting from fixes over time and have become more reliable.

At the other end of the spectrum, Volkswagen and Acura have existing models that continue to have below-average reliability. CR members report that their Volkswagen Atlas and Tiguan SUVs are problematic, just as they were in 2018 when first introduced. Similarly, the Acura MDX has had below- to well-below-average reliability since its light redesign, also called a freshening, in 2016, as has the redesigned 2019 RDX. The brands each dropped nine positions, the biggest fall in this year’s rankings.

Audi, BMW, and Subaru also dropped because they each introduced redesigned models—including the Audi A6, BMW X5, and Subaru Forester—that lowered the automakers’ overall brand reliability scores. Consumer Reports’ brand-level rankings are based on the average predicted reliability score for vehicles in the brand’s model lineup.

Our predicted reliability score is calculated on a 0-to-100-point scale, with the average rating falling between 41 and 60 points. For a brand to be ranked, we must have sufficient survey data for two or more models.

We have insufficient data to rank the Fiat, Jaguar, Land Rover, Maserati, and Ram brands.
<table>
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<tr>
<th>Brand</th>
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JANUARY 2020 CR.Org
Most & Least Reliable 2020 Models

The models in the green and red triangles are polar opposites. Those in green are the most reliable 2020 models based on our annual auto reliability survey of CR members, which we use to predict reliability based on reported problems for the past three model years. Most in green have strong Overall Scores, in part because of the boost from their impressive predicted reliability.

The models in red are the least reliable 2020 models based on our survey. Their Overall Scores have been pulled down by their subpar reliability.

The reliability scores are shown below in the circles. We’ve also identified trouble spots that CR members said were problematic with these 10 poor performers.
Our predictions are based on overall reliability for the past three model years, provided the vehicle has not been redesigned. One or two years of data will be used if the model was redesigned in 2019 or 2018. These charts give our predicted reliability score: 41-60 is average, 61-80 is better than average, and 21-40 is worse than average.

We base these on data gathered from our members each year about problems with their vehicles. CR’s latest auto reliability survey gathered data covering about 420,000 vehicles. We analyzed trouble areas and created an overall reliability score for each model and year. Serious problem areas that can lead to expensive repairs are more heavily weighted.

**Road Report Why It Pays to Wait**

**RELIABILITY PREDICTIONS FOR 2020 MODELS**

### SUBCOMPACT SUVs
- Hyundai Kona
- Ford EcoSport
- Mazda CX-3
- Nissan Rogue Sport
- Subaru Crosstrek
- Honda HR-V
- Chevrolet Trax
- Mitsubishi Outlander Sport
- Jeep Renegade

### COMPACT SUVs
- Mazda CX-5
- Nissan Rogue
- Chevrolet Equinox
- GMC Terrain
- Toyota RAV4
- Subaru Forester
- Kia Sportage
- Honda CR-V
- Hyundai Tucson
- Mitsubishi Outlander
- Jeep Compass
- Jeep Cherokee
- Volkswagen Tiguan

### MIDSIZED SUVs
- Toyota 4Runner
- Mazda CX-9
- Kia Sorento
- Nissan Murano
- Kia Telluride
- Jeep Grand Cherokee
- Hyundai Santa Fe
- Ford Edge
- Nissan Pathfinder
- Honda Pilot
- Subaru Ascent
- Honda Passport
- Volkswagen Atlas
- Jeep Wrangler

### LARGE SUVs
- Toyota Sequoia
- Chevrolet Tahoe
- GMC Yukon
- Ford Expedition
- Nissan Armada
- Chevrolet Suburban
- GMC Yukon XL
- Dodge Durango
- Chevrolet Traverse

### LUXURY ENTRY-LEVEL SUVs
- Lexus UX
- Buick Encore
- Volvo XC40
- BMW X1
- Mercedes-Benz GLA
- Mini Countryman
- Cadillac XT4

### LUXURY COMPACT SUVs
- Lexus NX
- Porsche Macan
- Buick Envision
- Infiniti QX50
- Audi Q5
- Volvo XC60
- Mercedes-Benz GLC
- Porsche Cayenne
- Tesla Model 3
- Lexus RX

### LUXURY MIDSIZED SUVs (CONT.)
- Lexus RX
- Lexus RX L
- Infiniti QX60
- Audi Q7
- GMC Acadia
- BMW X5
- Lincoln Nautilus
- Volvo XC90
- Tesla Model X
- Acura MDX
- Audi Q8

### LUXURY LARGE SUVs
- Lexus LX
- Buick Enclave
- Lincoln Navigator

### COMPACT HYBRIDS/ELECTRIC CARS
- Toyota Prius Prime
- Toyota Prius
- Honda Insight
- BMW i3
- Hyundai Ioniq
- Kia Niro
- Chevrolet Bolt
- Nissan Leaf
Road Report Why It Pays to Wait

HOW TO KNOW WHAT YOU’RE BUYING

If you’re looking for a new ride and want to follow our advice to steer clear of a potentially problematic redesign, you may find yourself confused by advertising promotions that play fast and loose with terminology. Follow these steps to success:

Always do your research in advance. The free model pages on CR.org let members know whether the model they’re considering is a brand-new debut or whether it has been redesigned from the prior year. The more complex or extensive the changes, the greater the chance of problems in the first year on the road.

If the car has been redesigned, consider asking the dealer whether there are any previous-generation models available. An added bonus is that the older model is likely to be discounted.

If you still want that newly redesigned model but don’t want to run the risk of first-year troubles, wait a year and check CR’s data to see whether it meets our reliability standards.

You may plan to lease or trade in your car before the warranty expires. But keep in mind that even though you won’t have to pay for repairs, you’ll waste a lot of time repeatedly taking an unreliable car to and from service, which can quickly get frustrating.
ROAD TEST

WE CONDUCT 50+ TESTS ON EACH VEHICLE AT OUR 327-ACRE AUTO TEST CENTER. FOR COMPLETE ROAD TESTS AND RATINGS, ALL-ACCESS MEMBERS CAN GO TO CR.ORG/CARS.

AUDI FIT A LOT into a little package when it redesigned the Q3. This compact SUV combines a restrained, classy interior with an exuberant driving experience. Even the base model—which starts at about $35,000—comes equipped with standard all-wheel drive, forward collision warning (FCW), automatic emergency braking (AEB), and heated seats.

Handling is sharp. The ride skews firm, but we think it’s better at absorbing bumps than competitors like the BMW X1 and Mercedes-Benz GLA. The Q3’s acceleration feels sprightly at all speeds, and the transmission shifts smoothly. But we’re not enamored with the raspy engine or the Q3’s 23 mpg overall fuel economy, which is low for this class. At least it doesn’t require expensive premium gasoline like some of its competitors.

A vivid touch screen with large, easy-to-read text dominates the center of the uncluttered dashboard. Frequently used features are controlled by well-labeled knobs and buttons that operate with satisfying ease, and the gear selector has a simple, conventional design.

The Q3 has more passenger space than its footprint suggests. The front seats are very supportive, and there is ample elbow room for the driver. There’s also plenty of space for rear passengers. You can slide the second row forward and backward, depending on whether you need more room for people or cargo.

But thick rear pillars hinder visibility, and blind spot warning (BSW) doesn’t come standard. Neither does keyless start nor a proximity key, all of which are disappointing at this price.

THE NEW AVIATOR delivers an upgraded driving experience from the Ford Explorer (which shares the same platform), complete with a sophisticated, luxurious cabin. We’re not thrilled with its unintuitive controls or 19 mpg fuel economy. But it uses regular fuel, not always a given with luxury models. A turbocharged V6 moves the Aviator down the road with effortless authority. The 10-speed automatic usually shifts quickly and smoothly.

The Aviator is surprisingly agile for a midsized SUV. It holds the road through corners, thanks to precise steering and minimal body lean. The ride is steady, and the taut suspension soaks up most bumps well. The SUV soars along the highway with impressive tranquility, but there’s some engine moan during quick takeoffs.

We like that the Aviator’s roomy and elevated driving position gives a commanding view of the road. The front seats offer a pleasing combination of plushness and support, but the spacious second row’s bottom cushion is oddly narrow. The tight third row is best reserved for transporting kids.

The cabin is lavishly finished with leather, matte wood, and chrome. But the controls are quirky to the point of being perplexing. The push-button gear selector can’t be operated by feel, the cruise-control interface is awkward and distracting to use, the voice-command button on the steering-wheel rim is too easy to activate unintentionally, and lumbar adjustments are made through the infotainment screen. FCW, AEB with pedestrian detection, BSW, and rear cross traffic warning are standard.

LUXURY COMPACT SUVs

Audi Q3
Pleasant and Practical

ROAD-TEST SCORE 84
HIGHS Handling, braking, front- and rear-seat comfort

POWERTRAIN 228-hp, 2.0-liter turbocharged 4-cylinder engine; 8-speed automatic transmission; all-wheel drive
FUEL 23 mpg on regular fuel
PRICE AS TESTED $43,940

LUXURY MIDSIZED SUVs

Lincoln Aviator
First-Class Flight

ROAD-TEST SCORE 82
HIGHS Acceleration, handling, ride, quietness, fit and finish, cargo room

POWERTRAIN 400-hp, 3.0-liter turbocharged V6 engine; 10-speed automatic transmission; all-wheel drive
FUEL 19 mpg on regular fuel
PRICE AS TESTED $64,420
Mixed Messages

These goofy postings will leave you scratching your head

Tell Me Where It Hurts
This is one dentist we’d be scared to visit.
James Berk, Huntington Beach, CA

You Get What You Pay For
Don’t expect the fourth one to be free, either.
Submitted by Bethany and Andrew Cahill, Leavenworth, KS

Should You Stay or Should You Go?
Maybe we’ll try the drive-through instead.
Submitted by Linda Giers, via email

You Do the Math
You don’t have to be Einstein to see that this promotion doesn’t add up.
Submitted by Jonathan Kagle, via email

Be on the lookout for goofs and glitches like these. Share them with us—by email at SellingIt@cro.consumer.org or by mail to Selling It, Consumer Reports, 101 Truman Ave., Yonkers, NY 10703—and we might publish yours. Please include key information, such as the publication’s name and date.
Build & Buy solves the car-buying puzzle

Save money, access our prescreened network of dealers, and see CR recommendations along the way! The deal you want is out there—in fact, car buyers save an average of $3,016* off MSRP when they use the Build & Buy Car Buying Service®.

See how much YOU can save at cr.org/buildandbuy

*Between 7/1/18 and 9/30/18, the average savings off MSRP presented by TrueCar Certified Dealers participating in the Consumer Reports Build & Buy Car Buying Service, based on users who received in-stock price offers and who TrueCar identified as purchasing a new vehicle of the same make and model as one of the in-stock price offers from a Certified Dealer as of 10/31/18, was $3,016. Your actual savings may vary based on multiple factors, including the vehicle you select, region, dealer, and applicable vehicle-specific manufacturer incentives, which are subject to change. The MSRP is determined by the manufacturer, and may not reflect the price at which vehicles are generally sold in the dealer’s trade area as not all vehicles are sold at MSRP. Each dealer sets its own pricing.
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 (*). The symbols shown at right 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, the manufacturer’s web address in Canada so that you can 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@cr.consumer.org and tell us what you think. We can’t reply to every email or implement every suggestion, but with your help we’ll try to keep growing to serve your needs.

CR Best Buy
Recommended models that offer the best combination of performance and price.

Recommended
Models that perform well and stand out for reasons we note.

RECALLS

2004-2011
MAZDA RX-8

On certain vehicles, long-term exposure to certain environmental conditions may eventually degrade the propellant contained in the passenger-front airbag, causing it to deploy with more force than normal. If the airbag inflator ruptures, fragments could be propelled toward vehicle occupants or cause damage to the airbag assembly.
**Affected:** 4,460 vehicles.

**What to do:** Owners will be notified by mail and instructed to take their vehicle to a dealer to have the passenger-front airbag inflator or airbag module replaced.

**Notes:** The Canadian climate results in the propellant degrading slowly. This recall is being conducted as a precaution to address future risk. It is expected that all airbag inflators will be replaced before their function would be affected. This recall supersedes recalls 2018-038 and 2018-584 (Mazda Recall 2018A). Vehicles repaired under the previous recalls do not require repair under this recall.

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**2012-2013 FORD FIESTA**

On certain cars, water and road debris can enter the battery junction box and result in corrosion of some electrical components. The low-beam headlamps and daytime running lights could turn off while driving. This recall applies to cars originally sold or currently registered in areas of heavy road-salt usage (Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland & Labrador).

**Affected:** 13,564 vehicles.

**What to do:** Ford will notify owners by mail and instruct them to take their car to a Ford or Lincoln dealer to service the battery junction box. The dealer will clean the battery junction box, install foam sealing to the cover, and replace any corroded fuses, terminals, or relays.

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**2013-2019 TOYOTA MODELS**

On certain vehicles, the hook and loop material used to attach the carpet to its under-padding may not be flame-resistant. As a result, when it is tested alone, the loop fasteners do not meet the requirements of Canadian regulations.


**What to do:** This is not arecall. The company has made production changes to ensure that all new vehicles meet the requirements of Canadian regulations.

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**2014-2016 LAND ROVER RANGE ROVER SPORT**

On certain vehicles, the bolts that attach the electric power steering assist motor to the steering gear may corrode and break, causing a loss of power steering assist. This recall applies to vehicles originally sold or currently registered in areas of heavy road-salt usage (Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland & Labrador).

**Affected:** 6,754 vehicles.

**What to do:** The company will notify owners by mail and instruct them to take their vehicle to a dealer to replace the aluminum bolts with steel ones and apply a wax sealer. If a bolt is found broken or breaks during the repair, a replacement steering rack will be installed.

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**2017 FORD EXPLORER**

On certain vehicles equipped with power front seats, the front-seat frames may have sharp metal edges.

**Affected:** 23,380 vehicles.

**What to do:** Ford will notify owners by mail and instruct them to take their vehicle to a dealer to install protective tape on the exposed edges on the inboard side of the seat frames.

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**2017-2018 TOYOTA PRIUS**

On certain vehicles, a connection in the main wire harness may have been damaged during assembly and could result in a loss of power to the drive wheels. An error message will display on the instrument panel and a warning chime will sound.

**Note:** This recall affects only vehicles that had the seat heater installed at the port facility.

**Affected:** 1,226 vehicles.

**What to do:** Toyota will notify owners by mail and instruct them to take their vehicle to a dealer to repair the wire connections.
2018-2019 INFINITI AND NISSAN MODELS

On certain vehicles, the rearview camera system does not return to the default setting when the transmission is shifted to Reverse. This could cause a reduction in rear visibility if a driver had previously adjusted the camera display. Canadian regulations require that the rearview image returns to its original setting each time the camera is turned on. **Affected:** 126,195 2018-2019 Infiniti Q50, Q60, Q70, QX30, QX50, QX60, and QX80; and 2018-2019 Nissan Altima, Frontier, GT-R, Kicks, Leaf, Maxima, Micra, Murano, NV, NV200, Pathfinder, Qashqai, Rogue, Sentra, Titan, Versa, and Versa Note vehicles.

**What to do:** The company will notify owners by mail and instruct them to take their vehicle to a dealer to update the software for the rearview camera.

2018-2019 MERCEDES-BENZ MODELS

On certain vans, the upper hood latch may not be properly installed. This could allow the hood to open suddenly while driving. **Affected:** 1,473 Sprinter, Sprinter 2500, Sprinter 3500, and Sprinter 4500 vehicles.

**What to do:** Mercedes-Benz will notify owners by mail and instruct them to take their van to a dealer to inspect and, if necessary, tighten the mounting screws for the upper hood latch. Any missing screws will be replaced.

2018-2020 FORD AND LINCOLN MODELS


**What to do:** Ford will notify owners by mail and instruct them to take their vehicle to a Ford or Lincoln dealer for an inspection of the driver and front-passenger seat recliners. For 2020 model year Explorer and Aviator, dealers will inspect the rear outboard seats. The seat structures will be replaced as required.

2019 HONDA CR-V

On certain vehicles, the owner’s manual incorrectly describes when the “passenger airbag off” light should turn on. **Affected:** 55,604 vehicles.

**What to do:** Honda will mail all current owners a sticker that has the correct description for the “passenger airbag off” indicator light. It will also provide the owner with instructions on where to place it in the owner’s manual. Owners who would like help installing the label can contact a Honda dealer.

2020 KIA TELLURIDE

On certain vehicles, the seat belts for the driver, front-passenger, and second- and/or third-row seats may be incorrect. Canadian regulations require automatic-locking retractors (ALRs) to be installed on forward-facing front-passenger, and second- and/or third-row seats. **Affected:** 2,192 vehicles.

**What to do:** Kia will notify owners by mail and instruct them to take their vehicle to a dealer to inspect the seat-belt assemblies. If the seat belts are incorrect, they will be replaced with correct ones.

2020 MERCEDES-BENZ GLE CLASS

On certain vehicles, the rear-door window trim bars may not be properly attached. This could allow the trim bars to separate from the vehicle while driving. **Affected:** 1,329 vehicles.

**What to do:** Mercedes-Benz will notify owners by mail and instruct them to take their vehicle to a dealer to inspect the rear-door window trim bars for proper installation. If necessary, they will be reattached.
## Autos

All of the tested vehicles are available in Canada. *Report and ratings, page 61*

<table>
<thead>
<tr>
<th>Make + Model</th>
<th>Price Range</th>
<th>Acceleration (sec.)</th>
<th>Fuel Economy (liters per 100 km)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>0-50 km/h</td>
<td>0-100 km/h</td>
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<tr>
<td>LUXURY SMALL SUV</td>
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<tr>
<td>Audi Q3</td>
<td>$38,900–$45,900</td>
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<td>LUXURY MIDSIZED SUV</td>
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<td>6.5</td>
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</tbody>
</table>

**Audi Q3**

PRICE AS TESTED
$43,940 (U.S.)

OVERALL SCORE 78

**Lincoln Aviator**

PRICE AS TESTED
$64,420 (U.S.)

OVERALL SCORE 72