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TAX REFUND SCAMS

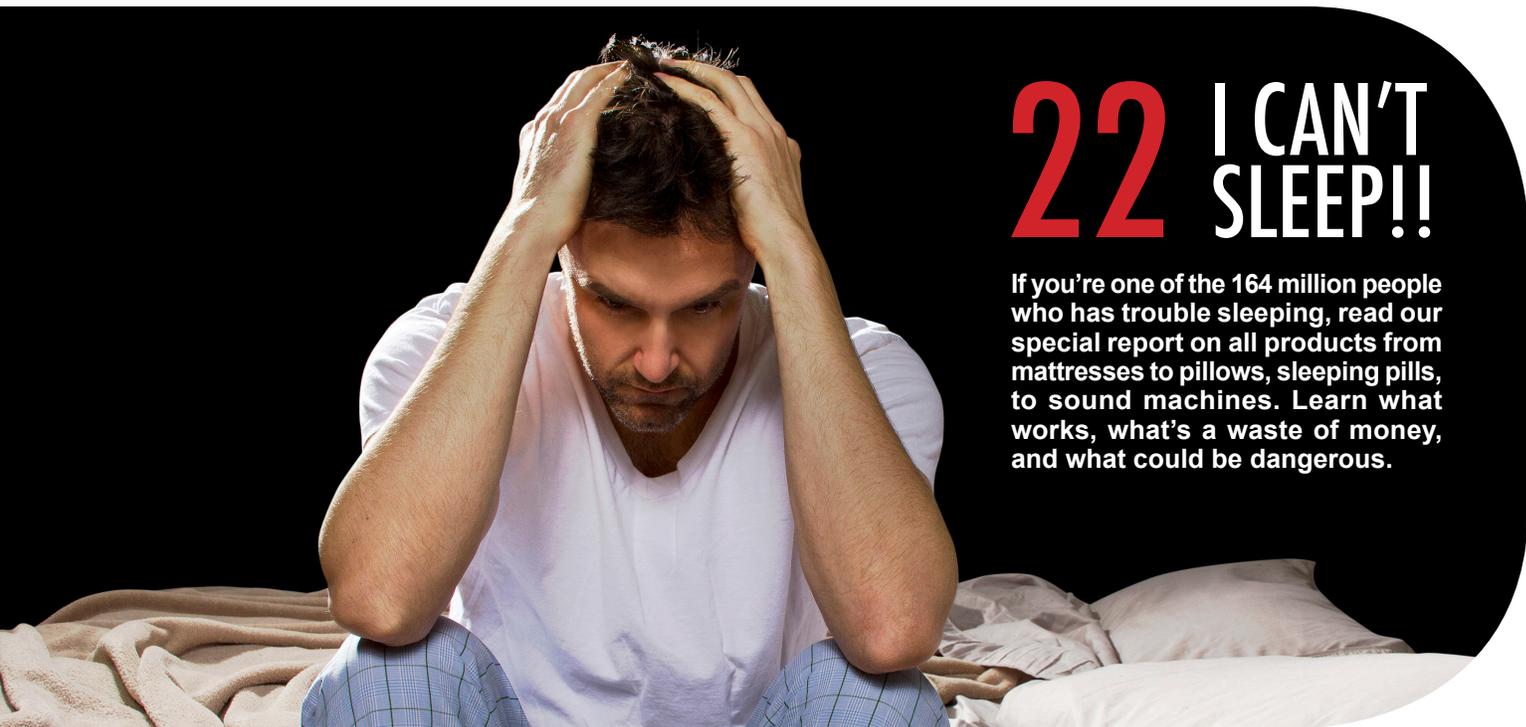
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The **UPDATE**



CROUDFUNDING OR CROWDFRAUDING?

BECAUSE CROWDFUNDING is built on trust, it's ripe for fraud. We're talking about the misuse of online forums such as GoFundMe, Indiegogo, and Kickstarter, which people use to solicit funds for their inventions, documentaries, and other projects. In exchange for your money, they may offer a sample of their product or a digital download, for example. But those making the requests are only as reliable as their promises—and those promises aren't always sincere.

The Federal Trade Commission recently settled its first crowdfunding case against a man it claimed had scammed contributors out of more than \$122,000. Erik Chevalier, using the business name The Forking Path Co., asked for funding for a board game called "The Doom That Came to Atlantic City." Almost 1,250 backers pledged \$50 or more, hoping to get a game or one of its figurines. Instead, according to the FTC's complaint, Chevalier kept the money, using it

Beware of these signs to avoid becoming a potential victim of online theft.

for rent, moving expenses, and equipment for another project. The settlement prohibits him from misrepresentations in future projects. He was also fined almost \$112,000, although that was suspended because he was unable to pay.

Similar scam crowdfunding have been outed by dismayed funders on such websites as AndriodPolice and Kick-scammed, and on the GoFundMe page on Facebook.

Crowdfunding has brought promising ideas to life, but

watch out for signs that you should do some more checking before you fork over any money:

There's no track record. Ideally, you want to support people who have done other successful projects. Solicitations appear on multiple crowdfunding sites. That may indicate a money grab.

If you think you've been the victim of a scam, file a complaint with the website, then at ftc.gov or with your state's attorney general.

BRACE YOURSELF FOR A SUGAR SHOCK

IF CUTTING DOWN ON SUGAR is one of your New Year's Resolutions, don't think that swilling reduced-calorie sodas such as Coca-Cola Life or Pepsi True will do much for your strategy. Sure, they might be lower in sugar than regular soda, which packs about 10 teaspoons into a 12-ounce can—but they still contain about 6 teaspoons. That's the daily limit for women, according to the American Heart Association; for men, it's 9 teaspoons.

So what's different? Coke Life and Pepsi True are sweetened with a mixture of sugar and stevia, a no-calorie sweetener from plant leaves. Though the green cans may lead you to think these drinks are better for you, don't lose sight of the fact that no soda is a healthy

choice. Some studies show that just one can of regular soda per day is enough to raise your risk of heart disease, type 2 diabetes, and obesity. As for stevia, "it's probably safe but we'd like to see more research," says Michael F. Jacobson, Ph.D., executive director of the Center for Science in the Public Interest. And most colas have artificial caramel coloring. Some types contain 4-Mel, a potential carcinogen, but you can't tell that from the label. So we recommend limiting food and drinks with caramel color. We didn't test Coke Life or Pepsi True for 4-Mel.

We did taste-test them, and our trained testers and untrained staffers said they preferred regular Coke and Pepsi over the low-calorie sodas.

Sweet News

Companies don't have to call out added sugar on food labels, but the FDA wants to change that.



A LIFE WITH NO WRINKLES

Luxury Laundry
Conventional steam irons like the T-Fal FV4495 Ultraglisse has high steaming rate and is very good at ironing fabric for a price of only \$45.



IRONING TO GET THAT CRISP, FRESH LOOK may seem quaint in an era when casual Friday has morphed into casual every day. Closets with less cotton and more blends mean you don't need to iron much, and studies have shown that about a quarter of all consumers iron only when absolutely necessary. So just how wrinkled does a garment have to be when for you to get out the iron? Standards vary—all the way up to that slept-in look. But for those occasions when the wrinkles just can't be overlooked, an iron that produces plenty of steam will remove stubborn wrinkles faster. (You'll find the best ones above.) Plus we tested several products claimed to smooth out wrinkles with an iron.

And yet there's no escaping dirty laundry. The average family does around 300 loads per year. Manufacturers get that your life is hectic and offer ways to take the pain out of the laundry routine, for a price. A large-capacity washer and dryer let you do more laundry at once. The biggest we've tested hold about 28 pounds of laundry, or about 20 full-sized bath towels, and the smallest hold only about 12 pounds, or nine towels. Options that trim wash time by 15 to 20 minutes without sacrificing cleaning ability also prevent pileups. And a dryer with a moisture sensor rather than a thermostat will recognize more quickly when laundry is dry, allowing you to get back to your life outside the laundry room.

THE DIRT ON HUMIDIFIERS

DID YOU KNOW that you should clean your humidifier every day? You probably didn't, given that 59 percent of respondents in an informal poll told us they don't clean theirs daily. And 26 percent admitted that they cleaned their humidifier just twice per month or even less often than that.

But that's a mistake. Dirty machines can release bacteria from standing water into the air, potentially causing flu-like symptoms—especially in people who suffer from asthma or allergies.

Our testers took our most recent batch of 34 models and measured microbial growth in the tank, then added bacteria and noted whether it was released into the air.

One type did best in our tests: The evaporative humidifier, which blow unheated air over a wet wick, didn't emit any bacteria. All but one of the two other types—the ultrasonic (fine mist) and the vaporizer (steam)—did.

How to clean yours:

Drain, rinse, and dry it every day. Every week, remove any visible residue with vinegar, disinfect with a bleach solution following the manufacturer's instructions, then rinse thoroughly. Do the same before and after storing your humidifier for the season.

For full ratings and the 11 models that performed well in our clean-air tests, go to ConsumerReports.org/humidifiers.



Clean Machine
The Honeywell HCM-350, \$60, was one of the best in our clean-air tests and scored a Very Good in our performance tests.

3 SIGNS OF A DYING CAR BATTERY



Losing Battery Life?

The Spirit A8 Car Jumpstarter, \$70, did well in our tests, and should get the job done until you get to the repair shop.

YOU MIGHT BE SURPRISED

to learn that most of the damage to your battery is done in summer, when high temperatures drive up the heat under our hood and accelerate the onset of failure. If your battery is aging, wintertime's low temperatures and thickened engine oil could be the final nail in the coffin.

Your first indication of battery failure might be a no-start, but you may have missed an earlier, more subtle warning. Signs of impending failure include the following:

1.) The obvious. The battery warning light appears on your vehicle's instrument panel.

2.) Ignition. The engine cranks slowly when the ignition key is turned.

3.) The Lights. The headlights dim when the vehicle idles.

Complicating matters, those are the same warning signs as a failing charging system or corroded battery cables. If your vehicle shows those symptoms, have a repair shop perform a simple check of your battery and charging system—it's often free with the understanding that the shop will perform any subsequent repairs. Your mechanic should do a battery-system check as part of winterization.

If your battery is not ready for replacement, you can carry a lithium-ion "jump pack" in your trunk. The Spirit A8 Car Jump Starter, \$70, did very well in our tests.

BE AWARE OF PRICING TRAPS



PLAN PRICING among the big four carriers (AT&T, Verizon, Sprint, and T-Mobile) is so bizarre and counterintuitive that customers, particularly those with multiple phone lines, may actually spend more money when trying to be frugal. Though the plans offer unlimited voice minutes and texts, the providers often charge a fee for every phone that accesses the service. And those fees can be higher when you buy less data. Adding to the confusion, T-Mobile insists on a specific data allowance for each phone; AT&T, Sprint, and Verizon dispense it in sharable buckets. More confounding still, the data bundle options vary in size among carriers. But with a calculator and these tips, you can slice through the subterfuge.

Tip 1: Consider purchasing more data than you think you need. Sprint Charges a \$20 access fee per phone for

data buckets of 4GB or less. (The 4GB of data, all sharable, cost \$50.) But if you choose the company's 8GB plan, that fee falls to \$15 per phone. (8GB of data cost \$70.) Do the math and you'll find that if you have four phones, the total cost for either option is precisely \$130.

Tip 2: Stay away from the two-year contracts still available at AT&T, Sprint, and Verizon. In addition, to hefty early-termination fees, you may have to contend with a whopping monthly \$40-per-phone access fee.

Tip 3: Consider the extras. T-Mobile allows subscribers to stream content from a number of popular video services without using any data allowance. Those services include ESPN, HBO, Hulu, Netflix, Showtime, and Starz. That means binge-watchers can indulge their passion on a minuscule data plan.

The Best in Petite Heat

THE BEST:

Honeywell HCE100B, Lasko MyHeat 100, Bionaire BCH4562E, Vornado SRTH.



WE TESTED four personal heaters that can be placed under a desk or workbench to boost the heat in a confined space, such as your cubicle at work. (Doesn't everyone had cold toes?) Though most of the regular heaters in our tests have an output of 1,500 watts, the output of these pint-sized space heaters ranges from 200 to 900 watts, so they cost less to run. Tops in the batch is the 3-pound **Vornado SRTH, \$45**, with an output of 900 watts. It is good at spot heating,

stays cool to the touch, and is relatively quiet. The **Bionaire BCH4562E, \$40**, isn't quite as good at heating, but it's super quiet and has a motion sensor that shuts off the heater if no movement is detected within 2 hours. We also tested the **Honeywell HCE100B, \$25**, and the **Lasko MyHeat 100, \$20**. They don't perform as well, but with outputs of 250 and 200 watts, respectively, they don't cost as much to operate—\$10 per season compared with \$50 for the Vornado.

Make Sure It's Safe

About 25,000 house fires and 300 deaths are attributed to space heaters each year, mostly caused when a heater is placed too close to furniture. In addition, 6,000 people end up in the emergency room with burns from touching a heater's hot surface. The safest heaters in our Ratings score a Very Good or Excellent on our hot-surface test. Here are other safety features that count:

Make sure the heater you buy carries a safe certification label from an independent testing

organization, such as the UL mark from Underwriters Laboratories, the ETL label from Intertek, or certification from CSA International.

A smart sensor that shuts off a heater when overheating is a must. You'll also want a tip-over switch that does the same if the heater is knocked over.

Most space heaters don't come with a ground fault circuit interrupter plug, which prevents electric shock, so manufacturers warn that they not be used around water.

BUYING A UHD TV? CONSIDER THESE TIPS



THESE DAYS, most manufacturers spotlight Ultra HD TVs—which can display greater detail than regular 1080p sets—as the premium models in their lineup. Almost all of them are LED LCD models, though LG offers a few UHD OLED sets. Here are three compelling reasons it may pay to wait before buying one:

You'll still be paying a premium. Prices have fallen in the past eight months, but some big-screen flagship models still sell for \$3,000 to \$4,000—and OLEDs for many thousands more. We expect significant price drops by this time of year.

There's not a lot of 4K content. To date, only a small number of movies and programs—primarily from streaming services such as Amazon,

M-Go, and Netflix—have taken advantage of the greater picture detail. However, expect to see the first 4,000 UHD Blu-ray players and discs later this year, and a lot more ultra-high-def streaming options in the year 2016.

Standards are still evolving. Some UHD features, such as high dynamic range (HDR) and a wider range of color, have yet to reach their full majesty. And some new TVs claim HDR capability. But we think it makes sense to wait until all of the standards—for TVs, streaming media, and Blu-ray discs—are nailed down to ensure that your TV can take full advantage of them.

For more information of selecting a UHD TV, go to ConsumerReports.org/cro/tvs/buyingguide.



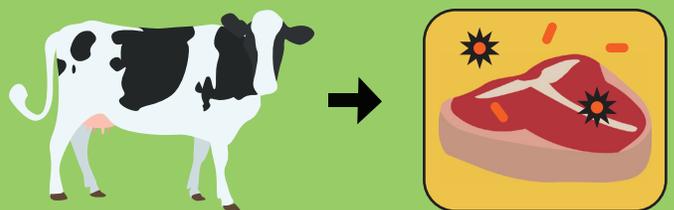
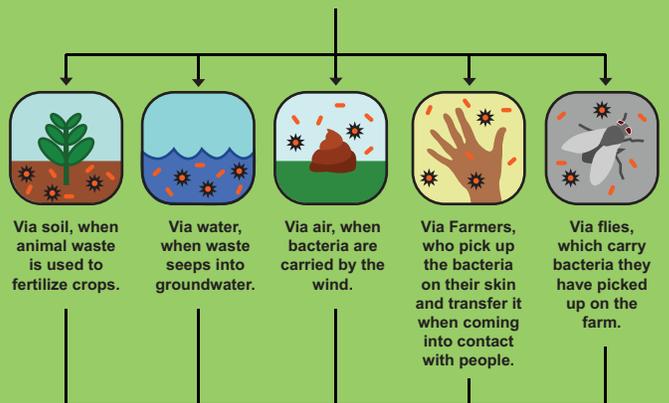
Dangerous Bacteria: From the Farm to You



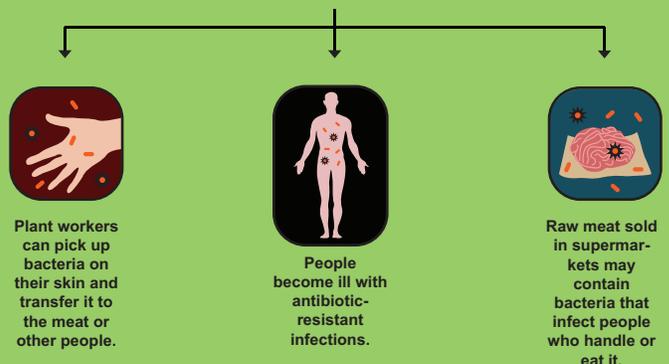
Healthy animals are routinely given antibiotics in their food and/or water. Bacteria that's present in the animals' intestines react with the antibiotics. Some of the bacteria are killed, but a few survive. Those resistant bacteria flourish.



Animals excrete resistant bacteria in manure, and the bacteria spread to the community in several ways:

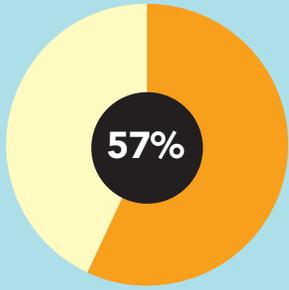


Resistant bacteria can also contaminate raw meat during slaughter or processing.

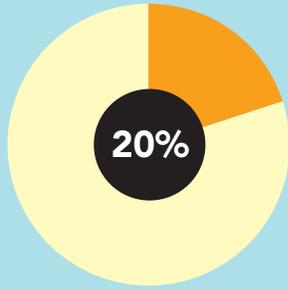


THE RISKY BUSINESS OF SLEEPING DRUGS

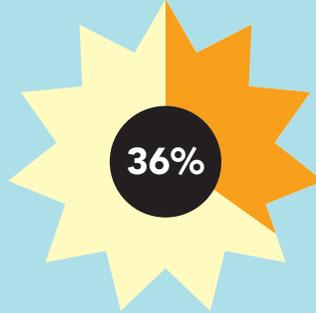
The need for slumber drives people to use sleep drugs in potentially dangerous ways, according to a nationally representative survey of 4,023 U.S. adults conducted by Consumer Reports in June 2015. Survey respondents who used over-the-counter or prescription sleep aids told us that at least once in the previous year, they have done the following:



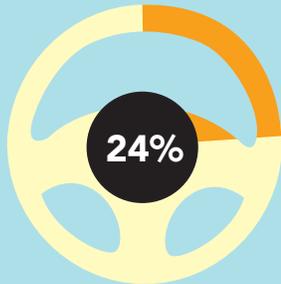
Took sleep drugs without allowing at least 7 hours of sleep.



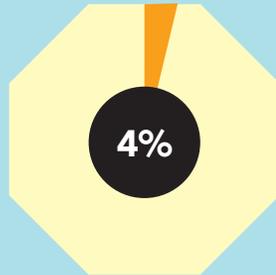
Took sleep drugs without allowing at least 5 hours of sleep.



Reported drowsiness the day after taking sleep drugs.



Drove within 7 hours of taking sleep drugs.



Dozed off while driving the next day.

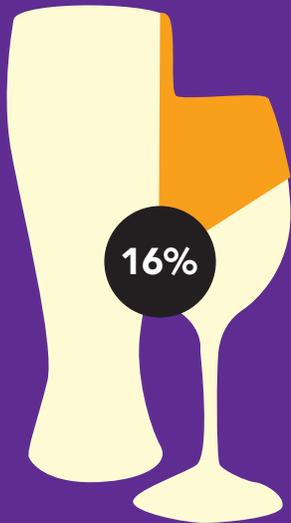


Took more than the recommended dose.



Mixed sleeping aids with alcohol or recreational drugs such as marijuana.

Mixed Rx, OTC, or supplemental sleep aids such as melatonin.



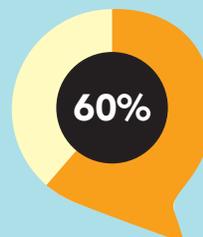
Drank alcohol to help them sleep.

In addition, the survey found that among people taking Rx sleep drugs...



Took Rx drugs every day.

Among people taking over-the-counter sleep drugs...



Didn't talk with a health professional about their use of the drugs.



Took OTC drugs every day.

THAT EMPTY FEELING

YOU'RE PROBABLY PAYING MORE MONEY FOR LESS PRODUCT

Have you ever felt duped when opening a bag of chips or a bottle of pills only to see a lot less product than you thought? Read the following stories and learn how to shop smarter.







WHEN SUDS GET SLIPPERY

Ed McGuire from Syracuse, N.Y. emailed us a photo of two different sized bottles of **Tide** Original—one 50 ounces and one 40 ounces—both sold at the same price. A company rep acknowledged that the laundry bottle was reduced in size, attributing the decision in part to rising manufacturing, transportation, and packaging costs. However, we noticed that regular Tide liquid continues to come in the previous 50 ounce size.

LOWERING THE BAR

Like other soap companies, **Ivory** has downsized; it shaved its standard bars from 4.5 to 4 ounces in 2012. But the iconic product has a smaller doppelganger. When you buy a 10-pack, you get the standard-sized soap cakes. Purchase a 3-pack, and the look-alike bars weigh in at only 3.1 ounces. Be sure to compare the cost of the soap on the price per pound (usually indicated on the unit-priced label), not on the cost per bar.



LESS FATTENING ICE CREAM

“Larger package, two less bars, same price. Really?” wrote Jacquelyn Wood of Salem, N.H., when she sent us a photo of a 10 and 8 pack of **Hood** ice cream sandwiches, each which sold for \$5. According to a customer service representative, the reason Hood shrunk its sandwich count last year was to be in sync with the industry standard. But the rep had no answer to why the box was made bigger.



HOT-DOGGING IT

This claim on a **French's** mustard bottle seems to indicate that consumers will get 40% more for their money. But the smaller print shows the difference between the 18 ounce bottle and the 14 ounce one is, well, just that. According to a customer rep, the label isn't misleading because the word “free” doesn't appear anywhere. “Back in the day, the mustard only came in 14-ouncers. We put 40% more in the bottle, so it would last all summer and you wouldn't have to go out and buy another. Sorry for the confusion,” the rep said.





**THE CHIPS
ARE DOWN**

Why is it when chip bags always seem to be so filled with air? "So the chips can move freely in the bag to avoid breakage," said a rep for **Tostitos**. When we asked why the snack giant recently shrunk the size of its tortilla from a pound to 12.5 ounces, the rep cited increased production costs. Fair enough, but the expectation that an unopened product will be only half full can make spotting downsizing even trickier.

SECRETS OF STORE BRANDS

Many juice giants have taken their refrigerated citrus juices down from half a gallon (64 ounces) to 59 ounces. But some store brands, such as **Great Value** Original Orange Juice, keep selling the old size. The other advantage of store brands is that they're around 25% cheaper than the big brands, and taste good.





BUYING THE IDEAL TV

With so many options,
buying a TV can be challenging.
Tune in to this step-by-step guide
to make the right choice.



It's a strange time to be shopping for a television set. The technology is halfway through its evolution from high-definition past to ultra high-definition future (more on the later). For some shoppers, the best strategy may be to wait and see how it all shakes out. But there are plenty of good reasons to spring for a new set now. Maybe you just upgraded from a cramped apartment

to a spacious new home, and your pee-wee TV seems as if it's lost in the living room. Or maybe you'd like a screen in the kitchen to watch those cooking shows. Then again, perhaps your 5-year-old set just gave up the ghost and now you have an excuse to get something modern. Our advice is to ignore all the hoopla and focus on finding something that truly fits your needs.

GO BIG

Sometimes the widely hyped “next big thing” in TV tech turns out to be a painful waste of money, which is why a lot of 3D glasses are hibernating in drawers right now. But you rarely regret investing in screen size. If you have the room for it, a mega-television inspires maximum awe for your dollar and showcases your favorite movies, TV shows, and games in all of their high-def glory.

As you’d expect, bigger TVs take a bigger bite out of your budget, especially when the screen gets into the stratosphere of 65 inches and larger. But prices have in fact been falling. You can still spend upward of \$3,000 for a loaded flagship model from a major brand, but you’ll also find 60-inch sets with top-notch picture quality starting at about \$900. In our latest TV Ratings, which include at least 40 sets with screens 60 inches or larger, more than half cost \$1,500 or less.

Of course, “big” is relative. In some rooms, a 70-inch set looks impressive; in others, it just seems menacingly large. But thin-bezel designs and super-slim depths common in many new models make them far less imposing.

When it comes to the right TV size, there are no hard-and-fast rules; personal preference and even visual acuity come into the picture, so to speak. But there are general guidelines. To figure out the size that’s best for you, use one of the many online calculators or apply the following simple guidelines.

With a 1080p set, pretty much standard for high-def resolution right now, measure the distance in feet between your couch and

where you’d like to place the TV. Then divide that number by 1.5 and multiply the result by 12 to determine the size of the optimal set in inches (measured diagonally). If you’re going to sit 8 feet from the set, for example, you should shop for a model that’s no bigger than 60 inches. With UHD TVs, which have higher resolution screens with more

densely packed pixels, you can go larger.

The goal is to create comfortable, immersive viewing experience. You don’t want to be so close that you can’t see the whole picture or so far back that you miss the high-def detail that you just paid for. Ideally, that Discovery Channel documentary on lions should fill your field of vision.

In terms of screen technology, the decision pretty much has

THE GOAL IS TO CREATE A COMFORTABLE, IMMERSIVE VIEWING EXPERIENCE.





CR's Best Buy, the Samsung UN60JU6500, is a 60-inch TV that delivers excellent picture quality and Hi-definition performance for a great price.

been made for you, which may come as a relief to confused customers. Manufacturers no longer make plasma sets, and OLED TVs, which combine the deep blacks and unlimited viewing angles of plasma sets with the thinness and energy efficiency of LCD TVs, are prohibitively pricy.

So, the average buyer will almost certainly be purchasing an LCD set. Just don't confuse so-called LED TVs with OLED sets; LED TVs are just LCDs with LED backlights. The downside to LCDs, however, is that many models have fairly narrow viewing angles, so the picture can look washed out or hazy if you're seated too far to the side of a room instead of directly in front of the screen. Don't rely on the manufacturer's viewing-angle claims of 170° or better. Consult our Ratings and spot-check TVs while in a store by stepping off to each side and viewing from above and below the center of the screen to assess the picture quality from various positions.

GO SMALL

Giant-screen TVs are great for a living room or basement home theater, but you probably don't want to shoehorn a 65-inch set into a bedroom or tiny apartment. You can find plenty of TVs at 32 inches and smaller without skimping on features or picture quality.

Start by thinking about what content you'll be watching. If you're looking for a bedroom TV for basic TV viewing, a basic set may do. But if you plan to stream movies and TV shows from Amazon Prime or Netflix, a smart TV with built-in Internet access may be a better choice. Don't pay too much more for that access, though, because you can add a streaming media player for as

little as \$35 if your TV has an extra HDMI input.

You can get 1080p on even the smallest screen sizes, but it's not necessary. Many viewers will be just as happy with a 720p model. At normal viewing distances, you won't notice the dip in detail and resolution. (But if the TV is doubling as a computer monitor, go with the higher resolution. It will produce clearer, easier-to-read text and more detailed images.)

The viewing angle is just as important with a small TV as a large one, especially when the set isn't placed directly in front of your bed, chair, or sofa. Most of the smaller models we've tested have fairly narrow angles, but there are a few standouts that will let you get a clear view of Jimmy Fallon's hijinks even if you're sacked out on the side of the room.

Relatively few TVs this size have 120Hz refresh rates (see "Tricky TV Terms Translated" on page 47), but don't sweat it. Here again, it's hard to detect a difference at normal viewing distances.

Many small TVs will let you down in audio quality. Few in our Ratings do a bang-up job there. But if the dialog is intelligible, even so-so sound from the built-in speakers may be sufficient for newscasts and sitcoms. If you watch a lot of concerts, movies, or action-oriented fare, you may want to consider adding a sound bar speaker. Many of them have Bluetooth, so they can be used to play music from a phone or tablet as well.

Don't forget about the TV's connections, too. Smaller sets generally have only one or two HDMI inputs, the most common way to connect Blu-ray players, cable boxes, game systems, and other devices. Make sure your set has enough for all of the high-def sources you use. If it doesn't, you may need to spend another



The LG24LF4520 (Top), LG32LF5600 (Middle), and the Samsung UN32J5500 (Bottom) are all small screen TVs that deliver excellent picture quality and a good viewing angle for low prices.

\$30 to \$80 on a separate HDMI switcher. You may also want to think about a USB slot for playing songs and displaying photos stored on a flash drive, or a headphone jack for listening to late-night programs when your partner is trying to sleep.

What you get is a good deal: Expect to pay about \$230 to \$300 for a basic 32-inch set from a major brand and as little as \$160 from a lesser-known manufacturer. A smaller set can be had for even less.

GO FRUGAL

You can get a great set of any size without spending a fortune, especially if you forgo some of the bells and whistles that drive up the price. In fact, the secret to choosing a budget TV isn't deciding what you want, but what you're willing to give up. Here are a few suggestions:

STAY IN THE SECOND DIMENSION. Three years ago, 3D was the rage. Now? Not so much. In fact, some manufacturers, including Vizio, don't even offer 3D capable sets. Unless you're a die-hard 3D movie fan, skip the feature—and the 3D Blu-ray player. That will save you money on 3D glasses too.

BE FINE WITH FLAT. Curved screens are another specious trend. Some people find them visually attractive. But our testing shows they do little to enhance picture quality. And when mounted, they don't sit flat against the wall.

DON'T PAY A PREMIUM FOR PIXELS. Prices for UHD sets continue to drop, but we think most budget-conscious buyers would be just as happy with a 1080p TV. For one thing, viewers often have a hard time seeing the greater picture in detail, which UHD sets provide, from normal distances. You won't find a lot of native 4K content, either. Many things about UHD sets are still being finalized (see "Before you Buy a UHD TV, Read This" on page 44), and they still command a hefty premium over regular HD TVs, although prices will almost certainly fall soon. For now, a top-performing 1080p set is still a smart choice for most people unless you're buying a huge TV and have a huge budget.

SKIP THE "SMART" SET. If you want to keep your spending in check, prioritize picture quality over Internet connectivity. We like smart TVs that can stream video, but that can add \$100 or more to the price. By contrast, a streaming media player provides similar functionality at a cost of about \$35 to \$100.

SAVE ON SPEED. Some sets have refresh rates of 120Hz to 240Hz, which can help reduce blurring motion during fast scenes. But for many viewers, especially those who don't watch a lot of sports, a regular 60Hz set is good enough. Our tests have found that some 120Hz models perform no better than 60Hz sets. If you decide you simply can't live without a fast refresh rate, check the motion-blur test scores in our Ratings and find a model judged at least Good overall.

COUNT YOUR INPUTS. Many budget TVs have only one or two HDMI inputs, which can be a major drawback if you have a lot of gear to connect, such as a cable box, Blu-ray player, streaming media player, and game console. We recommend that you choose a model with at least three HDMI inputs unless you'll be connecting your devices to a home-theater receiver.

If your TV has average to poor sound quality, you can always consider investing in a soundbar. You can buy a good one for as little as \$100 or as much as \$1,000.

GO SMART

Perhaps you want all those fancy bells and whistles for your TV? If price is not important to you, not to worry! We've tested several brands of "Smart TVs" and have given our input on each. Because smart TVs can come with all sorts of features, it can be difficult for consumers to make a decision.

Like Cat videos and Kardashians, smart TVs seem to be everywhere. According to the market-monitoring firm Quixel Research, close to 60 percent of the TVs sold this year will be in that category, the first time sales of Internet TVs have outpaced those of unconnected sets.

All smart TVs can access online content, such as streaming video services like Amazon Prime and Netflix. Basic smart TVs may be limited to the most popular ones; others offer a wide assortment of apps. Many have full web browsers, and some more sophisticated TVs can respond to voice commands, make program recommendations, and let you view content on your smart phone.

There's no single smart TV standard. Here's a quick look at the options from our top brands:

WebOS 2.0, an operating system made by **LG**, is among our favorites. Its main menu features a row of colorful tiles layered across the bottom of the home screen, so you can still see whatever you're watching. An amusing animation gets you started, and

the customizable home page lets you add, reorder, or delete app cards to match your preferences. The whole system is fast and responsive, and LG's Nintendo Wii-like point and click Magic Remote is great.

Originally developed for smartphones and watches, **Samsung's** Tizen system also has a row of colorful tiles arranged across the bottom. You can quickly access recently used apps and channels, search, or browse the Web. You need to touch the pointer button on Samsung's own motion-activated point-and-click remote to engage the onscreen cursor, so you're less likely to activate it accidentally.

Sony uses Android TV, successor to the failed Google TV. Compared with the sleeker smart TVs from LG and Samsung, Android TV seems complicated. The setup is clunkier—you need a Google account—and firmware updates take longer than they do for the other TVs we tested. Also, you can't reorder the menu so that favorite apps come first. On the plus side, the voice recognition performs well, and the system supports Google Cast for sending content from a phone or tablet.

Panasonic has tapped Mozilla's Firefox as its smart TV's operating system. A visual improvement over the older Viera Connect platform, this one works similarly, though the bubble-style icons for main activities are less complicated. The system has fewer total apps, but the main ones are there. We liked the universal search that includes streaming, live TV, and personal content.

