

CHOICE

Meal extenders

Kitchen gadgets to reduce waste

NEW PURPOSE

Transforming old tech

RESCUE MISSION

Tips for buying second-hand appliances

213
products
TESTED

Washing machines
Pressure cleaners
Phones for seniors
Headphones
Digital radios
Robot vacs
& more



Second chance

Out with the new, in with the old

Plus The telcos with the most-satisfied customers

Waste not, want not

Products must be designed to last longer

It is astonishing how rapidly our attitudes to waste have shifted in the past few years. Reusable coffee cups have gone from being a rarity to commonplace; there has been an explosion of alternatives to cling wrap; and websites that allow people to sell or give away unwanted items have boomed in popularity.

Within Australia, much of the credit for this shift in awareness about the waste we create in everyday life is due to Craig Reucassel's *War on Waste* TV series.

Many consumers have embraced a commitment to doing what they can to reduce what they put into landfill. However, there are limits to how much we can do on an individual level to reduce waste. The biggest reductions need to come from businesses changing their practices.

When we recently reviewed the packaging used by popular appliance brands, we found a wide range of approaches. While some companies were largely using recyclable cardboard packaging, others were still heavily reliant on polystyrene.

We also find a lot of variation when we survey consumers about how

long appliances sold by major brands last. Some appliances commonly last for many years without any faults, while others break down within just a handful of years. And when a business refuses to repair a product, that often means it needs to be thrown out.

There's a lot that our governments can do to fix this. For a start, we need more incentives for businesses to make products that will last longer.

One way to do this is to make longevity a point of competition. That's why CHOICE supports a labelling scheme – similar to the energy star rating scheme – to indicate how long you should be able to expect a particular product to last. If it's easy to work out which products will last longer, more of us will buy them and businesses will be forced to design more products that score well.

The labelling scheme would also indicate whether products are more easily repairable, based on the products being designed in a way that allows them to be pulled apart and reassembled with new parts.

As more and more appliances depend on software to operate, businesses also need to be required to provide updates for a reasonable



period of time, so you don't end up with a product that is in good physical condition but no longer works because the manufacturer has stopped supporting it.

Other parts of the world, such as in Europe and some American states, are way ahead of us when it comes to laws that require products to last longer. It shouldn't be that hard for Australia to catch up.

Alan Kirkland, CEO
Email: alan@choice.com.au
Twitter: @AlanKirkland

CHOICE

CHOICE gives you the power to choose the best goods and services, and avoid the worst. Wherever possible, we pay full price for the products we test, so we remain 100% independent. We don't take advertising or freebies from industry. We're not a government body and our consumer publishing and advocacy is almost entirely funded by membership. Memberships include online access and services such as CHOICE Help. CHOICE product ratings are based on lab tests, expert

assessments and consumer surveys. CHOICE staff also research a wide range of consumer services. They reveal the truth behind the facts and figures, and investigate the quality and the claims. **BECOME A MEMBER** To review the full range of membership options and benefits go to choice.com.au/signup. **MEMBERSHIPS/RENEWALS** Call 1800 069 552 or email us at ausconsumer@choice.com.au.





31









18



37





- 4 Checkout**
News, views and sneak peeks
- 14 Ask the Experts**
- 16 Your Say**
- 18 Second life**
 Our guide to buying second-hand appliances
- 24 Green goods**
 How to buy appliances that are more sustainable
- 28 Get smart**
 Upgrade an old TV
- 31 Fast fix**
 Boost the power on your old laptop
- 34 Old tech, new tricks**
 Give your out-of-date devices a new lease on life
- 37 Love your leftovers**
 Make your meals go further

- 40 Oats and porridge**
Which bowl is just right?
- 43 Brosa collapse**
Consumer issues continue
- 72 Index**
- 76 Hard Word**

TESTS

- 46 Robot vacuums**
 Hands-free cleaning
- 50 Washing machines**
Cycle guide and best models
- 55 Phones for seniors**
 4G-compatible models
- 58 Telco survey**
Which internet and mobile providers have the happiest customers?
- 60 Digital radios**
A slow-moving revolution

- 64 Headphones**
 Which models beat the rest?
- 68 Pressure cleaners**
 Performance under pressure



CHOICE magazine provides a selection of our top product reviews. We can't always include all the models we've tested, but you'll always find the products that scored the best. To view complete results for all our tests, go to choice.com.au, or call Customer Service on 1800 069 552 to add full online access to your membership package.

The latest consumer news in brief

IN THIS ISSUE:



p7 WA fines ticket scalpers



p8 Campaign to limit rent increases in Qld



p9 Toyota accused of greenwashing



p12 One in five struggle to pay telco bills

Advocates call for more banks to adopt anti-scam measures

Consumer advocates and ombudsmen have welcomed new initiatives from banks to prevent transfer fraud and are calling on more lenders to adopt similar measures. Westpac has joined Commonwealth Bank in applying a name check system to its account transfer function that provides an alert if the account name a customer has entered doesn't match the details associated with that account and BSB number.



Consumer Action Law Centre CEO Stephanie Tonkin says the initiative will help prevent people falling victim to fraudsters. "We're all being targeted by increasingly sophisticated scams and some will be stopped by the introduction of more robust customer identification systems like the one announced by Westpac."

Chief ombudsman at the Australian Financial Complaints Authority David Locke says these measures could also reduce false billing fraud targeting businesses. "It's important that all banks adopt measures to match names of accounts with BSB and account numbers if we are to stop some of the invoice hacking scams that we are seeing."

LIAM KENNEDY

Consumers warned in the lead up to buy now, pay later blitz

Last month, consumer groups and financial counsellors warned consumers about the harm being caused by buy now, pay later (BNPL) loans ahead of 'Afterpay Day' – a national marketing blitz by the major BNPL provider.

CHOICE has found that one in five buy now, pay later customers use the service because they saw an advertised discount. Discounts and special offers, like those promoted during Afterpay Day, encourage people to take out loans that can leave them trapped in a cycle of debt, as repayments and late fees mount.

Because of loopholes in financial laws, BNPL providers are evading important consumer protections. Until these loopholes are closed, consumers should know that discounts and special offers can lure them into debt and should take extra care when using these loans.

Close Lending Loopholes

If you'd like to receive regular updates on what you can do to make a difference, head online and check out closelendingloopholes.org.au.

YELENA NAM

Massive data breach at Latitude Financial

There seems to be no end in sight for data breaches, with almost eight million Australian and New Zealander driver's licence numbers stolen in a cyber attack on Latitude Financial Services. Latitude, which provides credit, loans, and insurance, also reported that a further six million customer records had been leaked, most dating back more than a decade. Passport numbers and monthly statements were also compromised.

Latitude is no stranger to controversy. Its buy now, pay later arm collapsed earlier this year; recent CHOICE investigations have found numerous fee traps in its interest-free payment plans at retailers like Apple; and Harvey Norman's relationship with the company earned it a Shonky in 2020. Now, with a class action lawsuit brewing and increased penalties legislated following the Optus and Medibank breaches, time will tell whether Australia's privacy regime is properly equipped to respond to these crises.

RAFI ALAM



booktopia

Booktopia fined \$6m for misleading customers

Placing your own restrictions on a customer's rights under the Australian Consumer Law can be bad for business, as Australia's largest online bookseller Booktopia recently found out. In a case brought by the ACCC, the Federal Court hit Booktopia with a \$6 million penalty for "making false or misleading representations on its website, and in dealings with consumers, about consumer guarantee rights".

Booktopia told customers they were only entitled to a refund, repair or replacement if they notified Booktopia within two business days of receiving a product that was

faulty or the wrong order. The two-day limit was something Booktopia made up, which didn't go over well with the regulator.

"Consumers are entitled to return faulty products within a reasonable time and receive a refund, repair, or replacement, depending on the nature of the fault," says ACCC commissioner Liza Carver, adding that "we do not know how many consumers may have been deterred from seeking a refund or replacement by Booktopia's misleading representations on its website".

ANDY KOLLMORGEN



PayPal must take action on money laundering protocols

The Australian Transaction Reports and Analysis Centre (Austrac) has accepted an enforceable undertaking from PayPal Australia, saying the company needs to do more to comply with anti-money laundering and counter-terrorism financing laws. Austrac says the undertaking comes after issues were discovered with PayPal's systems, controls and governance in relation to international funds transfers.

Austrac CEO Nicole Rose says the enforceable undertaking aims to ensure PayPal's ongoing compliance with their legal obligations. "Every business with obligations under the anti-money laundering/counter-terrorism financing Act must have robust systems in place to ensure they meet their requirements and play their part in protecting Australia's financial system from criminal exploitation," she says. "PayPal has cooperated with Austrac throughout the course of our regulatory enquiries, demonstrating its commitment to maturing its compliance arrangements," she adds.

JARNI BLAKKARLY

CHOICE seeking examples of unfair business practices

Have you ever found it difficult to get in touch with a business? Or had to click through seven different web pages before finding the cancellation button? These are just some of the ways that businesses can act unfairly to extract time and money from consumers.

While the EU and other countries including the UK and US have laws that prevent unfair trading, Australia does not. CHOICE is investigating what a prohibition against these unfair practices would look like in Australia and is building up a strong body of evidence to demonstrate why it's so important to fix this gap in the law.

Have you been treated unfairly by a business? CHOICE is seeking a broad range of examples – it could be anything from having a warranty automatically added to your cart, to paying more for a service as a long-standing customer compared to a new customer. Send us an email at campaigns@choice.com.au.

ALEX SÖDERLUND



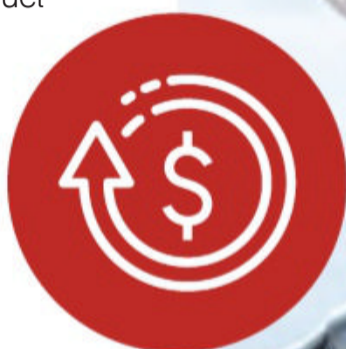
Global disruption keeping diesel prices higher than petrol

Australian petrol prices are up, but not as high as diesel prices, due to a variety of local and international influences, says the ACCC in its latest fuel report.

The study covering the final quarter of 2022 shows the average price for petrol at the bowser in major cities was up five cents per litre over three months, mostly due to the return of higher fuel taxes. “Despite lower international prices, the influence of the fully restored fuel excise and a lower AUD-USD exchange rate meant overall that average retail petrol prices across the largest cities were slightly higher than in the previous quarter,” says ACCC chair Gina Cass-Gottlieb. The average petrol price still wasn’t as high as diesel though, which was 40 cents per litre more expensive. Cass-Gottlieb says this was due to a “range of international factors,” including reduced supply from Russia, strikes at French refineries and

extra demand during the northern hemisphere’s winter, which kept the global diesel price above that of petrol.

LIAM KENNEDY



Five ticket scalpers the first to be busted under WA’s new laws

Five individuals who were allegedly trying to resell tickets to an Ultimate Fighting Championship (UFC) event at massively inflated prices have become the first to be stung by Western Australia’s anti-ticket scalping legislation. The Western Australian Government says the tickets to the recent UFC event in Perth were being sold at a mark-up of up to 430% – well above the 10% legal threshold for resold tickets. The five individuals each face a fine of \$2,000. Commerce Minister Sue Ellery says that before this action, only warnings had been issued as part of an “education” period, but that the “grace period” had now come to an end. “The massive mark-ups we have seen in some of these alleged cases are not just illegal – they’re immoral, as scalpers clearly seek to exploit WA consumers who are desperate to attend popular events that are sold out,” she says. “Online buying and selling platforms that fail to have a system in place to quickly detect and delete these illegal ads also risk prosecution, as they are equally responsible under the anti-ticket scalping legislation,” Ellery adds.

JARNI BLAKKARLY



Super Consumers Australia say no more cold calling on super



During the banking royal commission, witnesses were shocked to hear horror tales of unscrupulous operators cold calling Australians and selling them unwanted financial products. In one harrowing case, an insurer sold a young man with Down's syndrome insurance he clearly didn't need or understand. The royal commission recommended a prohibition on 'hawking' (or cold calling to sell) financial products (for example, life insurance and superannuation), and the government followed through and implemented this ban.

Increasingly, though, we're hearing stories of sketchy companies getting around this ban by calling people and offering financial 'services' (for example, financial advice) instead of 'products.' These services can include painfully expensive advice around accessing your super early or rolling over your super into a different fund.

Other cold callers are outright scammers, looking to get your personal data so they can steal your super. Super Consumers Australia director Xavier O'Halloran says the government should close the loophole and ban cold calling on financial services as well as products. It also needs to ensure regulators have the resources to pursue scammers. "Super is a long-term investment, and shonks shouldn't be allowed to harass people into making quick decisions that could ruin their retirement."

DANIEL HERBORN

Queensland's Make Renting Fair campaign

With the rental market becoming less and less affordable for many, more than 50 organisations across Queensland's housing and community sector earlier this year called on the state government to make rental laws fairer for tenants.

Among other things, the state's Make Renting Fair campaign is calling for rent increases to be capped at 10% above inflation and to only be allowed once per year. The changes are needed, advocates say, because some landlords and rental agents are not playing fair. With inflation at seven percent, the cap would mean that a renter paying \$500 per week could have their rent increased by no more than \$38.50 in a 12-month period.

Similar laws exist in the ACT, as well as parts of the United States, Canada and Europe. "Our rental

laws need improving to deliver greater stability and safety for renting families and to protect those households that are currently experiencing opportunistic and unreasonable behaviours from elements within the real estate industry," says Tenants Queensland CEO Penny Carr.

ANDY KOLLMORGEN



**make
renting
fair.**

Greenpeace files ACCC complaint over Toyota ‘greenwashing’

Environmental NGO Greenpeace Australia has asked the ACCC to investigate car maker Toyota over its environmental claims, which Greenpeace says are “greenwashing” and amounts to misleading and deceptive conduct.

“Toyota Motor Corporation makes claims in its advertising that give the false impression the company is leading the transition to clean cars, but the truth is Toyota is not leading the transition but is acting globally to block the take-up of electric vehicles,” says Lindsay Soutar, director of Greenpeace Australia Pacific’s Electrify campaign.

“All companies have a duty to tell the truth about their products. That standard must apply especially to a company like Toyota, which is Australia’s largest and until now most-trusted car maker. There needs to be a level playing field so that consumers can make informed choices about how to use their purchases to protect the environment.”

In recent months, both the ACCC and the corporate regulator ASIC have said that greenwashing and environmental claims by companies would be an area of focus.



JARNI BLAKKARLY

Gamers represented in latest internet consumer research

Aussie gamers are typically enjoying fast connections to servers with little lag, according to the ACCC’s first audit of the local online video game experience.

The report has found that latency – the time it takes to send data from a user’s device to a server and back while they’re playing – for a selection of popular games including Fortnite and League of Legends averaged 15 to 30 milliseconds. Latency increases the further the player is away from the game’s server, leading to lags and disrupted gameplay. Unsurprisingly, then, the survey found that local gamers encountered less latency when they were playing games that had a server in Australia, while people playing titles without a local server were more likely to have a poor gaming experience. This meant players in NSW and the ACT had the edge in many cases, due to the Australian servers for many games being located in Sydney.

ACCC commissioner Anna Brakey says more differences emerged depending on how players connected to the internet. “All fixed-line access technologies had relatively low latency for games hosted in Australia, [but] consumers on fixed wireless connections experienced higher latency than those using fixed-line technologies.”

LIAM KENNEDY



IMAGES: GETTY/HTTPS://RENTINGFAIR.ORG.AU/



Stronger consumer protections needed for the aviation sector

Flying is an essential service for many Australians. It connects regional communities, provides access to vital services, unites family and friends for important occasions and helps Australians explore more of their country.

But events in recent years, including the pandemic, have revealed a number of flaws in consumer protection within the aviation sector. Consumers regularly struggle to obtain satisfactory outcomes when flights are cancelled or delayed, and many people have been left out of pocket or given credits they can't use.

In the 2022–23 Budget, the government committed \$7 million towards the development of an Aviation White Paper. The terms of reference for this paper were released in February this year.

The White Paper will look forward to 2050, examining issues and setting long-term policies to guide the sector towards growth and innovation. This is an opportunity to restore consumer confidence and trust in the aviation industry, which is critical to the growth of the sector and will benefit the community and the economy.

CHOICE and the Consumers' Federation of Australia have made a submission recommending that the White Paper include a dedicated policy section and recommendations that strengthen consumer protections, as well as a section on the role of competition in the aviation sector.

BEATRICE SHERWOOD

Airlines flying more and starting to cost less

Airfares remain more expensive than before the COVID-19 pandemic swung a wrecking ball through the travel industry, but they're not quite as costly as they have been the past few years. According to the ACCC's most recent airline competition report, the price of discount fares decreased by a third in January 2023 after hitting a 15-year high in December 2022.

The airline industry made 5.9 million seats available for travel in January 2023, the highest number in more than six months. Qantas flew at 102% of its pre-pandemic capacity, Virgin at 96% and Jetstar at 84%, the ACCC reports.

"While it's positive to see airfares fall from record highs in 2022, passengers are still generally paying more to fly today than they were before the pandemic," says ACCC commissioner Anna Brakey.

And making more seats available doesn't mean passengers are necessarily going to fill them. In January 2023, 4.4 million passengers flew within Australia, which is 89% of pre-pandemic levels for the travel-intensive month.

ANDY KOLLMORGEN



Protection from travel company insolvency

Aside from credit card chargebacks, there's little protecting your hard-earned dollars from travel company insolvencies. In our travel insurance comparison, just three insurers cover insolvency for a travel provider, and none for a travel agent. Consumers lost money after travel agents Fly365 and STA Travel went bust during the travel bans, while Thai Airways and Virgin Australia just survived their own brushes with bankruptcy.

In light of this, CHOICE has proposed the ACCC look into an industry-funded last resort compensation fund.

Travel agency TravelManagers has come up with a potential model for the industry. It's established the TravelManagers Customer Fund, which is designed to protect its customers from insolvency of an airline or other travel provider that the agency uses. The fund is a ring-fenced, independent legal entity, which TravelManagers makes regular payments into – a kind of self-insurance pool for its customers.

In addition, customers' money is deposited into a client trust account before it's used to pay travel suppliers. While many ATAS-accredited travel agents are now required to maintain a client trust account, TravelManagers says it takes this a step further by insuring the trust fund account and publishing independent audit reports online.

JODI BIRD



Switching energy retailers leaving some customers confused

The NSW energy ombudsman is calling on energy retailers to improve the two-day switching process, saying poor handling of the procedure is leaving customers confused, struggling to get answers, or spending more.

In 2021, a change in market rules allowed energy customers to switch providers within as little as two days. But in a new report, the Energy & Water Ombudsman NSW (EWON) reveals that the intervention intended to help customers has left some worse off.

The study, which examines “unexpected consequences” emerging from the process, has found that some customers were being billed by two different retailers at the same time, or ending up on more expensive power plans.

EWON ombudsman Janine Young says this is down to some retailers not being transparent enough with consumers about when and how they can sign up to their power plans. “Retailers have the flexibility to choose how customers transfer to them, based on the circumstances of each customer,” she says.

While some companies could do better, Young says, others are setting a good example. “Some retailers are offering their customers a choice of when to switch, and are providing them with easy-to-understand switching information, ensuring a smooth and effective transfer process for customers.”

LIAM KENNEDY



IMAGES: GETTY

Day surgery: What you need to know

Day hospitals are increasingly popular for a range of medical procedures, but there are some things to know if you want to maximise your benefit from private health insurance if you need to visit one.

There are more than 350 private day hospitals around Australia that perform same-day surgical procedures and diagnostic and medical services. If you have cataract eye surgery, an endoscopy or colonoscopy coming up, chances are it'll be performed in a day hospital.

Make sure your health fund has a contract with the day hospital, or talk to your specialist or their receptionist and ask if they can charge you under your fund's gap scheme. Alternatively, you can switch to a fund that has a

contract with your day hospital up to the day before the surgery.

Your hospital insurance excess can also eat into your health insurance benefit. You should consider switching to a policy that doesn't charge an excess for a same-day procedure.

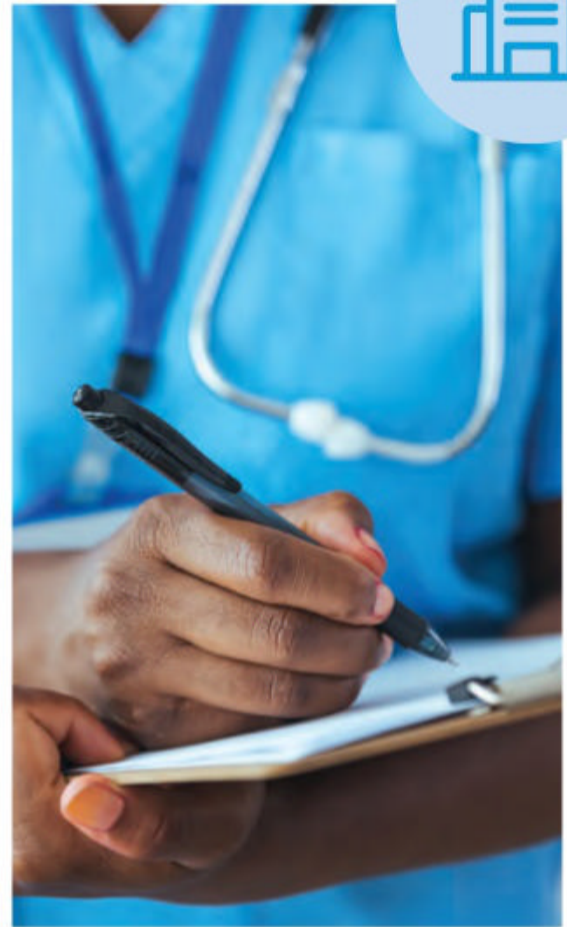
Funds that don't charge an excess for day surgery on some policies:

- GMHBA
- HCF
- HCI
- Medibank.

Funds with reduced excess for day surgery:

- RT Health
- St.LukesHealth.

UTA MIHM



Telco bills unaffordable for many

Research released in March by the Australian Communications Consumer Action Network (ACCAN) reveals many Australians are struggling to pay their telco bills. One in five missed a phone or internet payment because they couldn't afford it, ACCAN reports. It's a problem with far-reaching consequences. "Australians are enduring significant cost-of-living pressures and telecommunications affordability is a prominent issue for low-income consumers," says ACCAN CEO Andrew Williams.

"In 2023, having a home internet connection is essential. Without it, children can struggle to complete homework, and families can find it extremely difficult to access online services such

as telehealth, banking and important government services."

Of the 1000 consumers surveyed for ACCAN's report, 14% had used a payday loan, 16% a wage advance service, and 24% had borrowed from friends or family to pay a telco bill.

"Unfortunately, these statistics are not just statistics but are people's lives every day as they struggle with digital inclusion in our community," says Elle Morrell, a community development manager at Melbourne's Carlton Neighbourhood Learning Centre. "Access to digital connection is as essential a service today as access to electricity."

ANDY KOLLMORGEN



See which telcos rate best for customer satisfaction, p58



RANTS AND RAVES

Disability insurance is too confusing

Disability insurance is like a fire extinguisher; you hope you never have to use it, but you want to have confidence that it will work if you ever have a crisis and need it.

Millions of Australians pay for disability insurance through their super. This cover can be a lifesaver if you become ill or injured and can't work again. But good luck trying to get to the bottom of whether this insurance suits your needs or is likely to pay out if you become disabled – the insurance documents are often extremely long and convoluted and make shopping around for a good disability insurance policy virtually impossible for the average person.

Often the insurance guides refer to other documents, are very legalistic, and contain complex medical jargon (“impaired ventricular function of variable aetiology” anyone?). We’ve had lawyers who specialise in this field say they can’t make head nor tail of what these policies mean. If experts who work full-time across these policies struggle to understand them, what hope do the rest of us have?

Super funds publish insurance guides that are punishingly long – Australian Retirement Trust’s insurance guide, for example, runs to 37,803 words. According to an online word counter, this translates to a ridiculous 14-hour reading time. For comparison, classic novels like *Animal Farm*, *Breakfast at Tiffany’s* and *A Christmas Carol* are all substantially shorter.

Even if you have the legal skills and ample free time to read all these

documents, the super fund and insurer can change the terms at any time, meaning you may need to re-evaluate whether your policy still meets your needs.

The fine-print terms of an insurance policy aren’t irrelevant technical details; they can be the difference between a claim being accepted or denied. For a person making a claim, they can be the difference between financial security or financial ruin.

We’ve come

across cases of insurers denying the claims of people with a disability because they worked part-time or in an industry considered dangerous by the terms of their insurance policy.

These can be surprising – is it really that dangerous being a disc jockey or tour guide?

The relevant regulator, ASIC, has been monitoring consumer understanding of insurance and how well the super funds are doing at explaining their policies. Their research found that a third of people reported feeling confused,



Super funds publish insurance guides that are punishingly long

overwhelmed, or uncertain after engaging with their fund about their insurance. The regulator found evidence of some funds attempting to address this consumer confusion, but less than half of them were doing basics like using consumer testing to make sure members understood their communications.

The ideal would be a system where everyone is financially protected if they ever become disabled and cannot work again. In the meantime, communicating clearly (and succinctly) what this insurance covers and allowing people to shop around or work out if their cover meets their needs would be a significant step forward.

DANIEL HERBORN

ASK THE EXPERTS

Got a niggling question our team can help with?

Q I am considering buying a smart watch with a heart rate monitor and fall detection as my family has a history of heart issues and strokes. Do these watches actually work for this purpose?

A CHOICE tech expert Denis

Gallagher: Some smart watches are specifically designed to collect data about the wearer's health, such as monitoring the wearer's heart rate. We've tested lots of smart watches that perform these functions and yes, they do work, although some work significantly better than others. They're not as accurate as professional



medical equipment, but they can be pretty close and that's perfectly fine, as long as you're not using your smartwatch or fitness band for critical monitoring.



ASK US

Email your question to asktheexperts@choice.com.au or write to Ask the Experts, CHOICE, 57 Carrington Rd, Marrickville, NSW 2204. You can also tap into the 'brains trust' at www.choice.community.



Q I purchased an Asko dishwasher in December 2019. It recently began leaking and flooding, so I tried to get an Asko technician to inspect it. I was told they wouldn't be able to attend for two weeks, so I got a general dishwasher repairman to come instead. He informed me that a small plastic connector tube had split and the dishwasher's computer had been affected by the water and would need to be replaced by Asko. When I rang Asko, they told me the machine was out of warranty and I would have to pay for a diagnostic appointment as well as the parts and return appointment to fit the replacement part. Surely this dishwasher is not fit for purpose with so many parts failing after just over three years?

A CHOICE Customer Service: Under the consumer guarantees of the Australian Consumer Law, goods must be safe, durable and free from defects for a reasonable period of time. These consumer guarantees are separate from the manufacturer's warranty, which means that even if the dishwasher is already out of warranty, you may still be protected.

We recommend that you contact Asko again via a formal complaint letter or email. Mention to them that you believe that the dishwasher does not meet the consumer guarantee of 'acceptable quality'. Note that on this basis you would like it repaired (if repairable) or replaced (if not repairable). Explain that you would like a resolution within a few business days and that if they do not respond, you intend to lodge a complaint with Consumer Affairs Victoria.

If you'd like, add that you are a CHOICE member and that we are taking an interest in the outcome of your complaint. If that doesn't work, your next step could be to escalate it with your state's consumer affairs body.



Q I have pet insurance with Medibank Private. My dog has had very limited medical intervention and only one medical procedure other than desexing. The pet insurance premiums are \$384.21 per month, which is more expensive than my own private top hospital and extra cover with Medibank Private. This cost is prohibitive and totally unrealistic. My dog is 11 years old and as she ages it becomes almost impossible to change cover. Any advice would be greatly appreciated.

A CHOICE insurance expert Uta Mihm:



That sounds very expensive. In the past there were very few providers offering new insurance for older pets, but the good news is this has changed and there are now a number of providers that offer new accident and illness cover for 11-year-old dogs – see choice.com.au/petinsurance. When getting quotes from providers please make sure that any pre-existing conditions are covered – you can generally get cover if it's a temporary condition that can be fully cured and your pet has been symptom-free for at least 18 months. It's also a good idea to ask your vet what conditions they think your pet may experience as it ages and how much the vet treatment would cost. You're currently paying \$4600 a year for insurance – if you can't get cheaper cover it might be a good idea to consider a savings account instead.

IMAGES: GETTY

CHOICE Help

Grounds for complaint

Member Amanda contacted us about her rights in regards to a coffee machine that she'd bought from Appliances Online. The coffee machine had stopped working after being used for only three months. Amanda reported that one of the main automated functions that stops the water coming through the group head of the coffee machine was playing up. She'd already contacted the retailer requesting a replacement, as the coffee machine was almost brand new and she was unable to use it for its intended purpose. The retailer came back to her offering to raise a service call with the manufacturer, and suggested they contact Amanda directly to ensure all troubleshooting methods were followed and to advise her on the coverage and eligibility of the manufacturer's warranty. Amanda wasn't happy with the offered solution and reached out to CHOICE for some direction.

We explained to Amanda that under the Australian Consumer Law (ACL), warranties are separate from consumer guarantees. Warranties can't replace, change or take away a consumer's basic rights. Under the consumer guarantees of the Australian Consumer Law, goods purchased come with automatic guarantees that they are of 'acceptable quality', meaning they should be safe, durable and free from defects for a reasonable period of time. If the product fails to meet the standard outlined by the consumer guarantees, then a consumer may be entitled to receive a free remedy of either a repair, refund or replacement (depending on whether the failure is classified as either minor or major). A problem is major if at least one of these applies: you can't use the item, repairs can't be made quickly or at all, it's unsafe, or you wouldn't have bought the item if you'd known about the problem.

We suggested that Amanda contact Appliances Online once again through a formal letter and mention to them that they have obligations under the ACL and that she believes the coffee machine wasn't of 'acceptable quality'. We also suggested that she request the coffee machine be replaced.

Amanda followed our suggestion and the retailer responded, asking her to provide a video of the issue. After she sent the video, a replacement coffee machine was arranged within a couple of days.



CHOICE Help is our in-house consumer rights information service for CHOICE members. We'll arm you with the information and tools you need to tackle your consumer issue and help you work towards a solution.

CONTACT US at choice.com.au/choicehelp.

CHOICE

YOUR SAY

If you've had a bad experience, been ripped off or scammed, tell us and help other CHOICE members avoid the same traps. If you've had a great response to a complaint you've taken to a manufacturer or retailer, our members want to know about that too! Letters may be edited for length and clarity.

CONTACT US!

Email us at
yoursay@choice.com.au
 or write to Your Say,
 CHOICE, 57 Carrington Road,
 Marrickville, NSW 2204.



The beat goes on

In 1968 I was given a Sunbeam electric hand mixer as an engagement present. I cook and bake a lot at home and so this mixer has received a lot of use, at least twice a week, and is still working as efficiently as the day I received it – it has just had its 55th birthday! It obviously looks well worn, but has worn well, and I am not looking forward to the day when it eventually stops working. So full marks to Sunbeam on producing such a simple and fantastic product. In recent years small appliances have had a very short life.

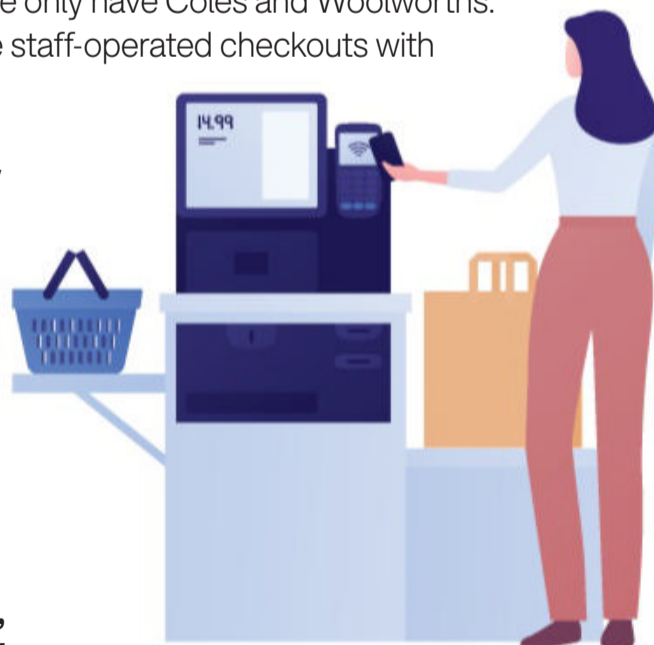
Susan Dadswell, St Leonards, NSW



I read your article on supermarkets ('Tricky business', CHOICE Feb 23). It seems to me supermarkets only want people to do short shops, not their weekly grocery shopping, and installing more self-serve checkouts is a convenience for the supermarket, not the shopper. In my regional town we only have Coles and Woolworths. Coles has replaced most of the staff-operated checkouts with self-serve ones. There are only two staff-operated checkouts and no matter what time of day you go, most of the self-serve checkouts are not being used while there is always a queue at the others.

More savings for the company, less care for the customers and staff. I was a loyal Coles customer for years. I now shop at Woolies.

**Brenda Montgomery,
 Bega, NSW**



We had a hand-held shower from Australian owned and operated bathware manufacturer Astra Walker that cracked, rendering it unusable. The shower was two years outside of warranty; however, Astra Walker replaced the shower, free of charge, and dispatched it expediently – no persuasion required. Brilliant service!

Liz C, Geelong, Vic





 We purchased an InSinkEerator Evolution 200 five years ago when we remodelled our kitchen. Two weeks ago, it suddenly stopped working. It was not stuck, it just wouldn't turn on. We called the number listed on their website for Adelaide service. A representative answered immediately and explained it had a six-year warranty, and to text him a photo of the registration label and he would come look at it the next day. I sent him the photo and he replied that it was covered under warranty but he would have to order one as they didn't have any in stock. The next day he arrived and installed a "loaner" because it would take seven days for the new one to arrive. A week later he replaced the loaner with a new InSinkEerator Evolution 200 and was friendly, helpful and best of all, efficient.

This is the fastest and most trouble-free experience we have ever had with an appliance failure and replacement, so kudos to InSinkEerator Australia, and especially to the representative in Adelaide for such excellent customer service.

**Robert and Sheryl Finder,
Tennyson, SA**

CHOICE SOCIAL MEDIA

Join the conversation online. We're on Facebook, Twitter, Instagram and our own forum, CHOICE Community. This month: NutriBullets, e-readers, stick vacs and more.

Community choice.community



What are your tips for peeling onions?

@vax2000: I usually peel the onion then cut in half leaving the roots in place. I then cut vertically to near the roots then turn the onion around and cut horizontal to the roots. Get nice regular diced onions this way.

@maggie1: I wear my Rural Fire Service goggles.

@Galath: The best way I've found is slicing them close to the rangehood with it turned on, that way all the gasses get taken away and your eyes stay dry.

Facebook @choiceaustralia



Is a NutriBullet blender worth it?

Tanya K: Have had my NutriBullet for three years. No issues. Makes fantastic smoothies, way better than my old blender did.

Kyla B: As long as it crushes ice for my margarita.

Pammi S: The cups should be a universal fit, I know that much.

Ralph M: Judging by how many turn up in op shops I have to wonder.

Twitter @choiceaustralia



Do you read using an e-reader, traditional book or both?

@johnverp1: E-reader for several reasons: storage, instantaneous purchases, less bulk while travelling, marking-up options, easier to have several books on the run.

@bairngley: Easier to check back on a forgotten or barely remembered character or misremembered details with the search function in an e-reader than with the brain machine.

@imatplay: Depends on content. Fiction is OK in e-reader. Non-fiction not so much.

Instagram @choiceaustralia



Dyson vs LG: Which stick vacuum is best?

@sanshinesydney: Had a Dyson. When it needed the motor replaced after six years I bought LG 'cos it was cheaper, and I regretted it. Back to Dyson again.

@houndstohomes: LG LG LG LG – have had two Dyson stick lemons, then LG was a breath of fresh air – superior in every way.

@tragic_tracy: Neither. Ryobi is best. ■





Second life

Buying used appliances can help reduce the strain on your wallet and the environment.

Liam Kennedy shares everything you need to know about shopping second-hand

With rising prices, shrinking household budgets and increasing concern for the environment, it's no surprise more of us are buying second-hand.

According to online marketplace Gumtree, Australia's used product market grew by 44% to \$62 billion in the three years to 2022, as more people opted to buy used items, ranging from clothes to furniture.

Appliances, including whitegoods (fridges, dryers and washers),

electronics (TVs and computers) and smaller household devices (vacuums and other cleaning and kitchen items) have also provided rich pickings, with a 2022 Statista survey finding

**15% of
Australians
have bought
second-hand
electronics and
11% a household
appliance**

15% of Australians had bought second-hand electronics and 11% had bought a second-hand household appliance in the previous year.

To help you find a bargain and reduce waste, we've spoken to product and industry experts and brought back the best tips for buying a used appliance or extending the life of one you already have.

NEED TO KNOW

- Buying a used appliance can be a good way to get reliable goods for less and help the environment.
- You can shop online or in person, but always make sure the appliance is safe and fit for purpose.
- There are free ways you can repair and extend the life of an appliance and keep it out of landfill.

Why buy second-hand appliances?



1 LOWER COST
Because CHOICE pays retail prices for the hundreds of

appliances we test every year, we've witnessed the sharp increase in the cost of these products in recent years.

The purchase prices of washing machines, fridges and dishwashers have grown by as much as 26% between 2018 and 2021, which is well beyond the general level of inflation in the economy.

Price is a major factor motivating CHOICE member Peter Briggs, who has bought several used appliances in recent years. He says a carefully selected purchase of something like a bread maker, for example, can be a worthy investment: "Even though it's not the latest model, if you get a good one, you'll bake heaps of loaves out of it."

The lower price for second-hand appliances means you can also get access to high-grade products from premium brands that might normally be out of your price range.

"Often these brands have a good reputation for lasting longer and being more repairable. Doing your research beforehand can land you a good deal on appliances that have a long second life," says Matthew Steen, director of reviews and testing at CHOICE.



2 LESS WASTE
Australia's annual output of e-waste (unwanted

batteries or products with plugs and cords) is growing faster than other forms of rubbish, more than doubling in the decade to 2018–19, according to a Productivity Commission report.

That year, Australians threw out over 500,000 tonnes of e-waste, but only half of this was recycled, with the rest ending up in landfill.

While recycling an appliance is better than leaving it to rot in the ground, where it can leak dangerous chemicals, Steen says trading unwanted yet functional devices ensures more of their 'finite' components get a second life.

"Keeping your appliances maintained and selling them on when you no longer have a use for them ensures those resources are kept in the economy for longer, rather than going into waste or recycling, where most times we're unable to salvage all of them," he says.

Which appliances to buy second-hand

Steen says the best appliances to buy used are those that tend to maintain core functions for a long time and that have been tested to ensure their safety.

"Expensive items that have a long life like whitegoods and TVs are good options. For any electrical equipment, it's best to have them professionally tested so you know they are safe to use before buying," he advises.

CHOICE whitegoods expert Ashley Iredale agrees that fridges, washing machines and dryers can live out good second lives, as long as they aren't too close to the end of their expected lifespan – usually about 10 years.

He also warns that advances in energy efficiency mean some whitegoods can be better second-hand acquisitions than others.

"Newer appliances should generally be more efficient than older appliances. That may not matter too much for a washing machine or dishwasher, but a modern fridge will be way more energy efficient than an older one, so you may also want to factor in higher running costs."

CHOICE small appliance expert Adrian Lini tests a range of household devices from vacuum cleaners to coffee machines and says while it's possible to get a good deal buying these products second-hand, shoppers should exercise extra caution around battery-operated products such as stick vacuums.

"All batteries lose their ability to charge over time. If you have the ability to test the battery, that would be great," he suggests. "Otherwise you may be purchasing a product that can only run for a couple minutes before needing to be recharged."

CHOICE member Peter, meanwhile, recommends scouring the second-hand market if you're looking for a former "fad product" that's gone ▶

IMAGE: GETTY



through a surge in popularity in the past few years.

“There’s an opportunity to wait and get those other products a lot cheaper from people who haven’t found a use for them.”

How to choose a good second-hand appliance

If you’re researching an old appliance, our online product reviews let you browse discontinued items. This means that even if the product is no longer being made, you may be able to see how it stacks up against the latest items. You can also draw on the knowledge of fellow consumers regarding which brands last the longest in different product categories by looking through the results of our product reliability surveys – we’ve crunched the data on a range of goods including fridges, washers and TVs (see *CHOICE* Sep 22).

If you’re close to buying an appliance, all our experts strongly recommend inspecting it in person and giving it a test run. What you’ll want to look for will depend on the type of appliance.

WHITEGOODS



Iredale says whitegoods may not have all the accessories that originally came with it, so you should

check it has everything you need.

“You probably won’t mind not getting the egg-holders that came with the fridge, but there’s other stuff that might be important to you. A drying rack for a clothes dryer? Maybe. A lint filter for a dryer? That’s a must have.”

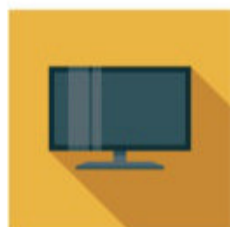
For fridges, you should check that the seals around the door are intact and that the fridge isn’t too loud or doesn’t make any unusual sounds when running.

If it’s a washing machine, door seals should be intact and mould-free and

any hoses should be free of cracks or leaks. The shock absorbers should also be in good condition and prevent the machine from moving around when it’s running a cycle.

Iredale also recommends steering clear of any whitegoods with rust on the exterior, as this is a sign the product has been kept outside or has a leak.

ELECTRONICS



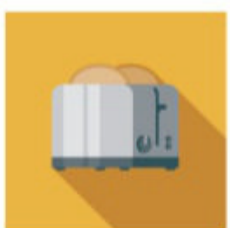
If you’re considering buying used electronics, *CHOICE* TV expert Scott O’Keefe says to make sure any items

have been cleared as being safe to use with a test and tag procedure.

For TVs, he advises looking at the remote control, as this will give an indication of how well the unit has been looked after. If it doesn’t come with one, it might not be worth buying the TV, as generic replacement remotes may not work with every brand.

If this is all in order, O’Keefe says it’s important to then ensure the TV will be able to do everything you want it to. This could mean checking to see that it supports your favourite streaming apps and making sure it has the correct outputs for a soundbar or any other device you plan to connect to it.

SMALL APPLIANCES



For smaller household products, Lini says to give any prospective purchases a test run. This is especially important for anything battery-operated – running it for a few minutes will reveal if its power storage is still up to scratch.

For kitchen gadgets such as toasters and coffee machines that can build up dirt quickly, it’s a good idea to thoroughly inspect them to make sure there’s no mould or leftovers lurking inside.

Lini also recommends comparing the recommended retail price with the owner’s price, taking into consideration how long they’ve owned the item. A dramatic drop in value over a short time can suggest the product is not held in high regard by the business or person selling it.

In any case, when buying a used product, it’s helpful to chat to its previous owner, ask why they’re selling the item, and quiz them on how it’s performed in

their care. Then consider this information against the price and your own appraisal to see if it’s a good deal.

CHECK FOR SAFETY RECALL

Even if an appliance looks to be in good condition and appears to be operating as it should, it’s important to check if that model has been recalled for being unsafe.

When we did a spot check for recalled baby and kids’ products on second-hand marketplaces in 2021,

we found plenty of items for sale that had been pulled by the authorities.

The quickest way to see if a product is subject to recall is to put its serial, model or any other identifying number or code into the search bar on the ACCC’s Product Safety Australia website at productsafety.gov.au.

For fridges, check the seals and that it isn’t too noisy or making unusual sounds

The remote control can be a good indicator of how well a TV has been looked after

Where and when to buy a second-hand appliance

“There is a plethora of second-hand options,” notes Steen. “It used to be there were retail shops you could walk into, but these are rarer these days. Online marketplaces such as Facebook Marketplace and Gumtree are more common.”

Some of the product experts and experienced buyers we spoke to preferred to source used appliances from online classifieds, mainly for the opportunity to come face-to-face with a product’s owner and ask about its performance.

Whether you’re going to used-appliance shops or browsing online listings, Iredale says you can boost your chances of landing a good buy if you time your foray carefully.

“You can probably pick up some bargains around the end of the university year when international students are packing up and heading home – look for Facebook Marketplace ads or trawl notice boards at your nearest university campus,” he suggests. “You could also be proactive and post ‘washing machine wanted’ ads on those same notice boards.”

BRICKS-AND-MORTAR STORES

The proliferation of online marketplaces and person-to-person trading does raise the question of what a bricks-and-mortar store can offer that a private sale can’t.

To find out, we spoke to a range of second-hand appliance stores in major cities.

The upshot is that if you walk into a used appliance shop, there’s a 50/50 chance you’ll be able to test the product then and there, but every store we spoke to assured us they test appliances themselves before putting them on display.

Another benefit these businesses offer over ad-hoc sellers is that they’re more likely to deliver larger items such as whitegoods to your home and



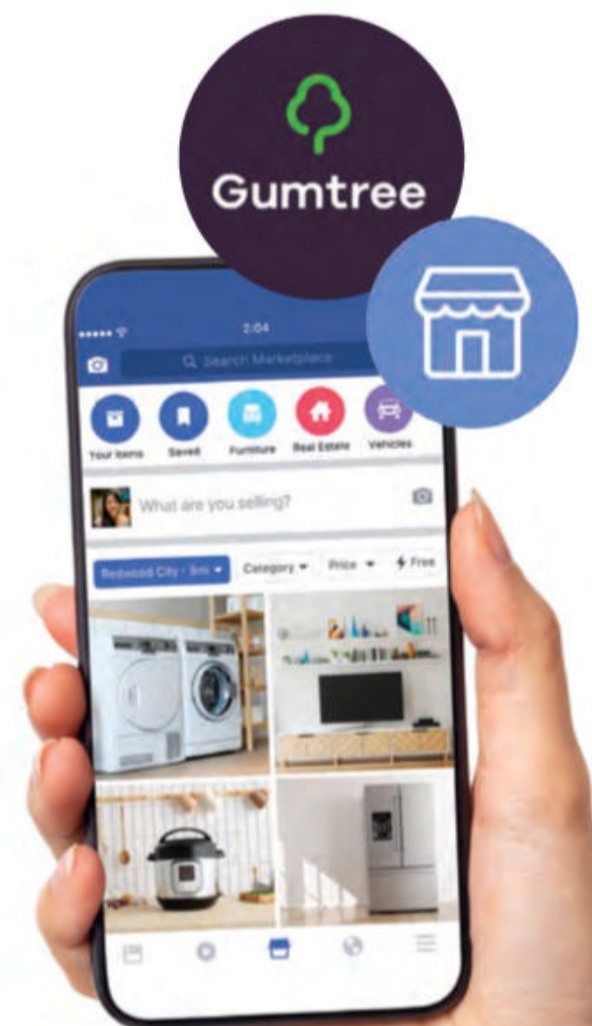
dispose of any unwanted predecessors for you.

Also, when asked how their businesses compared to forums like Gumtree, almost all shopkeepers were quick to point out that their goods came with warranty. One even admitted that consumers may find a cheaper appliance online, but this wouldn’t come with the guarantee of his business, which had a reputation to uphold.

Another upside to physical stores that many of our experts pointed out was that they often sell ‘seconds’ – discounted items that have never been used, but might have spent time as display models or copped a dent before they could make it to the shop floor.

If op shops are more your thing, Salvos and Vinnies say some of their stores also stock appliances. Items are tested and tagged before going on sale, and you may be able to try the item out yourself before you buy.

Both organisations say delivery services vary from store to store and it’s best to check beforehand, but if delivery isn’t available, staff may be able to recommend a courier service. ▶





Your rights

Most principles of Australian Consumer Law (ACL) apply to traders who make a business out of selling second-hand appliances, but not to individuals making a one-off sale to another person.

This means when you buy an appliance from an established business, it has to be of acceptable quality and as described and you can demand a remedy if this isn't the case.

However, if you're taking part in a private sale from somebody looking to offload an old appliance on Gumtree, Facebook Marketplace or at a garage sale, these same rights won't apply, so choose purchases carefully.



Repairing and maintaining old appliances

Buying a second-hand appliance isn't the only way to keep e-waste out of landfill. You can also invest in what you already have by way of minor repairs and maintenance to keep your devices going a little longer. These tips can also be used to set up a newly purchased second-hand appliance for a longer life.

Lini says simply keeping the item clean is one of the best ways to keep many household items running longer.

"Cleanliness is a huge part of extending the lifespan of any small appliance that is food or cleaning related," he explains. "Dust and leftover grime can either damage or stain parts of the machine as well as make it work harder for the same result, which will shorten the lifespan."

Iredale warns against trying to repair the wiring on appliances, but says other small fixes are appropriate.

"If you're missing a wheel on a dishwasher tray, that's a five-second job. Door seals on fridges are a little more complex, but provided you can

find the right one and are reasonably handy it's a great way to give an old fridge a new lease on life."

And while some appliances like TVs will provide few opportunities for DIY, you can overcome dud software by connecting an external device that has the apps your TV won't support (see our guide on p28).

REPAIR COMMUNITIES

If there's a major issue with an expensive appliance that's out of warranty or beyond its reasonable lifespan, it's often best to seek out an established repair business. If it's a cheaper appliance your first instinct might be to just chuck it in the bin, but before you do, know that there are a few free (or cheap compared with buying a new product) ways you can keep using an appliance you love.

The Australian Repair Network is an advocacy group that campaigns for greater repair rights for consumers, and it supports a nation-wide network of repair cafes – not-for-profit enterprises that host free pop-up repair events.

“We’ve got over 100 that operate in Australia and there’s 2500 now in the world,” says network chair Professor Leanne Wiseman. “[They’re places] where people come together, just volunteers, to help people fix their things.”

Wiseman, who established and manages a repair cafe initiative at Griffith University’s campuses, says smaller electrical appliances make up a “really high volume” of the goods people bring to her cafe events.

She says many repair cafes have experienced electricians on hand who may be able to rectify an issue with your device and teach you about it in the process.

“The idea is that you’re able to bring whatever it is in yourself and you stay there with the repairer and then you take it away at the end.”

One such repairer is Michael Farmer, an electrical technician at The Bower Reuse and Repair Centre in Sydney.

Farmer’s work often sees him finding fixes for members of the public who’ve brought in electronics to the centre’s repair cafes and paid workshops, with most jobs involving minor mends to everyday items.

“We get a lot of kitchen appliances ... and power tools. [Often] the person didn’t feel like they needed to spend another \$30 because the issue seemed something straightforward to fix, but they just didn’t have the knowledge or skills or tools to do it themselves,” he explains.

If you’ve got an appliance that could do with some repair cafe love, Farmer says searching on social media

is often the quickest way to find your nearest social repair enterprise.

“A lot of the repair cafes and similar organisations are community-based.

So, one of the best ways to find out what you’ve got available in your community is to just do a search on social media, or search for events happening around you.”

ONLINE HELP

A new service bringing repair-seekers to community initiatives like The Bower is Fixable (fixable.co), an online forum where people can post about their broken goods and get advice from fellow users and moderators.

Brendan Norris founded the platform 18 months ago and says appliances are the source of most of the queries it receives. A big part of Fixable’s mission, he explains,

Repair cafes are not-for-profit enterprises that host free pop-up repair events

A big part of Fixable’s mission is to stop smaller, cheaper items from contributing to e-waste

is to stop smaller, cheaper items from contributing to Australia’s e-waste pile.

“When you have something really expensive, [like] a flat screen TV or an expensive watch, you’re more likely to take that to a [repair] business. We’re big on the hobbyist repairers who might fix things for free or for a small fee, so that we can try to keep those cheaper items out of landfill.”

To this end, Norris says he’s often telling people to go to repair cafes, but highlights that commercial repair businesses also play an important role for users on his platform.

And while he’s encouraged by the surge in interest in reuse and repair he’s been seeing, Norris is quick to nominate the future direction he’d like to see the local repair ecosystem take.

“We really want to attract repairers themselves. We have hundreds of people who don’t have repair skills that join [Fixable] because they love the idea of repairing things. [But] we’d love more people with repair skills.” ■

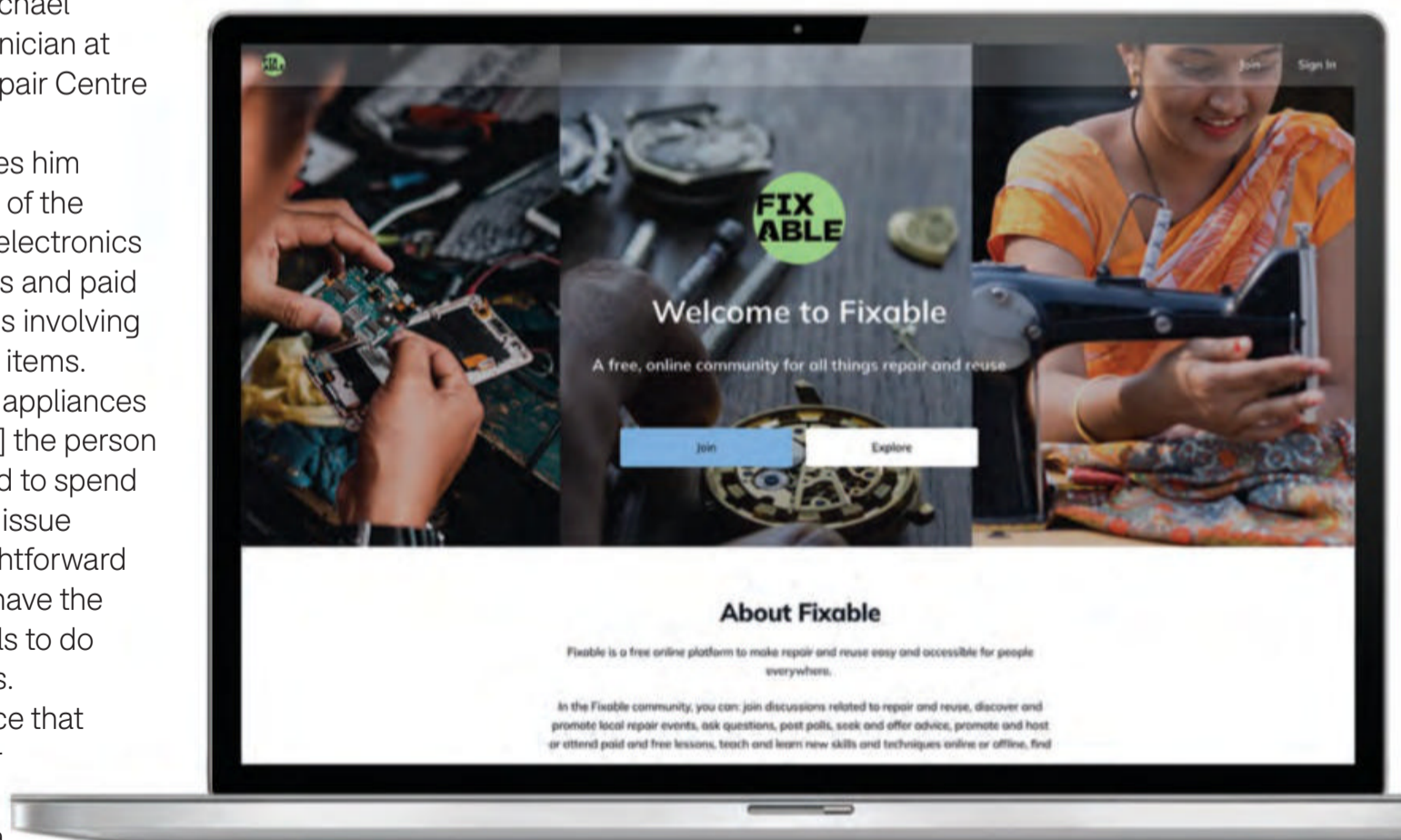


IMAGE: GETTY



NEED TO KNOW

- A sustainable appliance performs efficiently for a long time, suits your needs and is made of safe, re-usable and recyclable components.
- Using a sustainable appliance can decrease your utility bills, reduce your carbon footprint and minimise e-waste.
- Check energy efficiency ratings, read expert reviews and research green claims to make sure the appliance you're buying is a more sustainable option.

Green goods

Liam Kennedy explains how to buy new appliances that are better for you and the planet

Making a more sustainable choice when shopping for new products is easier for some categories than others. While choosing ethically-sourced coffee beans or recycled toilet paper may be a no-brainer, knowing which appliances are energy efficient, long lasting and made using environmentally friendly components can be a lot trickier.

But, with some research and close attention, you can confidently buy whitegoods, electronics and cooking and cleaning devices that not only take less of a toll on the environment, but will also support sustainable business practices and save you money.

Why choose a sustainable appliance?

Buying an appliance that uses less power will mean your household will spend and pollute less in the long run, thanks to a drop in your energy consumption.

If the appliance also performs more reliably, for longer than its competitors, that means you'll be buying new products less frequently and doing your bit to keep e-waste – one of the fastest-growing waste streams – out of landfill.

It also means more of the components made from finite resources that go into these work-horse gadgets will be kept in the economy for longer, where they can continue to serve a purpose and then possibly be recycled, repurposed or reused.

Finally, buying a product made with components that are more eco-friendly means you're further reducing the contributions your appliance will make to pollution once it is eventually disposed of.

Products that do better than average in our tests are going to be more useful for a longer period of time

What counts as a sustainable appliance?

EFFICIENT, LONG LASTING AND HIGH PERFORMING

Any appliance that functions well, lasts a long time and consumes less energy and water than its competitors is likely to be a relatively sustainable choice.

Even after decades of calling out bad performers, CHOICE continues to come across household devices that fall short, from washing machines with dismal dirt removal to vacuum cleaners that just suck (but not in a good way). On the flipside, there are often products that do better than average, giving them a head start in the sustainability stakes, simply because they're going to be more useful for a longer period of time.

The water and energy efficiency of a product is also a potential indicator of sustainability.

Comparing the extra toll big appliances like fridges put on power bills, we've found there can be more than \$1000 difference in 10-year

running costs between the least and most efficient models. The same goes for water use, with some washing machines using almost four times as much per cycle as others.

What's more, some models also outshine competitors in terms of staying power, as we've learned from members who've contributed to our product reliability surveys over the years.

SUITS YOUR NEEDS

Even if you have an appliance that scores well on the criteria above, if you're not using it correctly, you might be hampering its potential and wasting precious energy.

If you're keeping your fridge half-empty or storing it in an uninsulated space such as a garage, for example, you're making it harder to keep your food cool. This extra energy use may counteract some of the advantages of choosing a more sustainable model.

Similarly, running a washing machine with small loads that don't fill the drum could also lead you to use more energy, considering that two half-capacity loads will use more energy than one full-capacity load.

STRONG ECO CREDENTIALS

Buying from a brand that gets good marks for being ethical and sustainable means your appliance is more likely to have been made in a way that's less harmful to people and the environment.

Granted, this isn't always easy, due to the proliferation of 'greenwashing' in the market, but there are strategies you can adopt to begin to sort the bogus claims from the legitimate and

trustworthy certification schemes we include in our reviews, which we'll discuss later.

In the meantime, you can make sure any product you buy isn't made with chemicals that are harmful to the environment (some fridges,

for example, still use hydrofluorocarbon refrigerants that are greenhouse gases).

You can also check the extent to which the product is made of recycled materials or if spare parts are readily available.

Appliances that are made with reused components are rare in Australia, but

some brands like Beko, for example, sell whitegoods partially made of recycled plastic. And other manufacturers such as Asko have factories

that are specifically managed to minimise their environmental impact. They also

aim to have all product components weighing over 50 grams labelled for recycling, to help consumers dispose of their goods properly.

End-of-life initiatives can also impact appliance sustainability. Whitegoods in particular contain large amounts of metal, plastic and other valuable materials that can potentially be salvaged and then reused.

Some whitegoods retailers, including The Good Guys and Appliances Online, offer take-back schemes when you buy new goods, and most electronics are covered by one recycling initiative or another, helping to prevent more finite resources being devoured in the production of new goods. ▶

You can check if the product contains recycled materials or if spare parts are readily available

Appliances that are made with reused components are rare



Do they cost more?

CHOICE director of reviews and testing Matthew Steen says sustainable appliances don't necessarily cost more upfront than others. In any case, he says, it's important to consider the price in the context of how much you'll be paying for power, water and consumables like washing detergent over the appliance's lifetime.

"Each appliance is an investment in terms of how much it will cost you in the long run. We've found your appliance purchase cost makes up a third of your overall costs, with another third going to energy and water costs and a final third to consumables," explains Steen.

With this mindset, Steen says, you can think about paying more for a sustainable appliance as a 'blue chip' investment, as it will perform better and cost you less in the long run.

A good example of this is the choice of heating method many households will be weighing up as winter approaches. Our experts have found that reverse-cycle air conditioners are the most efficient way to heat most homes, but these are more expensive and harder to install than portable space heaters.

The payoff emerges when you look at the long-term running costs, with space heaters costing up to twice their purchase price to run each year, while the annual toll from an air conditioner will be less than its retail price.

PROGRAMS TO HELP YOU BUY

If the cost of something like an air conditioner is too much for you, there are state and territory government rebates, loans and subsidies available.

Some of these programs can deliver as much as \$15,000, but check first to see whether you qualify, as you will need to meet specific criteria.

Not-for-profit organisations are also playing a role, with Good Shepherd offering up to \$2000 to those who qualify for its No Interest Loan

Scheme to pay for essentials, including appliances.

For more information on state and territory, charity and private company programs, visit the federal energy department's rebates and assistance website at energy.gov.au/rebates.

How to choose a sustainable appliance

CHECK EFFICIENCY AND PERFORMANCE

You can immediately get a sense of the impact an appliance is going to have on your utility bills by looking at its energy- or water-efficiency rating.

The star-based energy rating label has been a common sight on Australian appliances for over 30 years and is mandatory for most of them, including for TVs, dryers and fridges. The companion WELS scheme for water use hasn't been around quite as long, but is an extra requirement for water guzzlers like dishwashers and washing machines.

These labels, which assign each product a rating out of 10 or six stars, are a good way to get a sense of a device's efficiency.

It's important, though, to make sure you're comparing products with a similar size or capacity, as an appliance that's efficient but bigger than what you need is going to cost you more in the long run.

It's also worth noting that star ratings may only tell you part of the story, especially for something like a washing machine where the rating is based on a warm program run on an 'eco' setting.

CHOICE reviews go further and test these products the way they're most commonly used (cold washes for washing machines, for example) and also measure how much energy electronics such as TVs consume when they're left on standby mode.

This information is then used to calculate energy- and water-efficiency



scores, which in turn influence our overall CHOICE Expert Rating.

This is published alongside other information shedding light on an appliance's sustainability, such as reliability scores and ethical and social gradings of manufacturers from Shop Ethical.

INTERROGATE GREEN CLAIMS

As touched on previously, the appliance industry is no stranger to greenwashing. The eco claims of 17 electronics and home appliance businesses were identified as being of concern by the ACCC in a recent investigation. With the peak consumer watchdog casting doubt on the environmental claims of some companies, it makes sense to be sceptical.

The best way to protect yourself against false claims is to dig a little deeper:

- If a product claims to be recycled, check for additional information on whether this only covers certain components and if so, look for detail on how much of the part is made of reused items.
- Look for third-party certifications that back up a company's assertions, and research the appraising organisation online if you're not sure about its legitimacy.
- Be especially wary of companies making absolute claims about products, such as "100% emissions-free", and confirm with a third party that a good is recyclable if it claims to be.

If you think a green claim could be misleading, you can file a report with the ACCC.

LOOK AFTER YOUR PRODUCT

After you've bought your appliance, it's important you practise basic maintenance to extend its lifespan and save you the expense of having to find a replacement sooner.

For smaller devices like kitchen goods, this can be as easy as keeping your item clean, so it doesn't have to work harder (and consume more energy) for the same result.

The same goes for whitegoods. Regularly rinsing your dishwasher filters and running a cleaning cycle on your washing machine can help to keep them in good working order.

Steen advises that it's good to also keep an eye on the reviews and prices of consumables such as detergent to ensure you're still getting the best results. Once you know you're using the best, it pays to use less of it.

"Experiment with using smaller amounts of detergent – a lot of us launder mostly clean clothes, so put in half a scoop so you can lower your consumables cost over the life of your washing machine or dishwasher," he says. "We've experimented with using half and quarter scoops and we still got good soil removal from the best performing detergent."



Sustainable electronics

With computers, connected devices and other electronic products becoming increasingly vital in our daily lives, it's important to think about how we can make sustainable choices with these products in particular as they grow in number in our homes.

The good news is that the LCD and OLED technology in modern TV screens makes them much more energy efficient than their plasma predecessors. Any new TV you buy should therefore have a decent energy economy.

When browsing computers, think about how much processing power you need and buy accordingly, as high-performing models will chew up more energy.

It also pays to compare the energy star ratings between similar-sized models here too, as computer monitors can consume as much energy as a TV.

Finally, as with all appliances, it's always worth researching whether your electronic item will be accepted by an accessible recycling service once you're done with it. ■

Sustainable appliances don't necessarily cost more upfront than others





You may not need a new smart TV just yet. **Alice Richard** talks to our TV expert **Denis Gallagher** about how to breathe new life into an old model

Technology moves so quickly that a TV that was cutting-edge when you bought it can feel outdated after just a couple of years. If your TV isn't 'smart' but you want to watch your favourite shows, movies and sports using a streaming service like Stan, Netflix or Binge, you might be looking at buying a smart TV.

Or maybe your smart TV isn't the best model on the block any more, and you're wondering whether to upgrade.

Here's the good news: you don't necessarily need to rush out and buy the latest and greatest smart TV just so you're up to date. There are some simple tricks you can try to smarten up your existing TV.

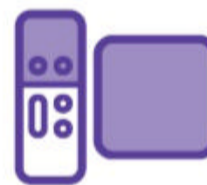
Before you do anything, check your TV to confirm that it has an HDMI port

How to make your old TV smart

Can you use a streaming service on a regular TV? Absolutely! You can use the smarts of another device to upgrade your regular TV.

There are a few ways you can go about doing this, depending on your TV's capabilities and your budget:

- Connect a streaming device or gaming console to allow video and music to be delivered to your television over the internet.
- Use a smartphone to mirror or cast to your TV if it supports this feature.
- Stream shows on a laptop and watch them on your TV by plugging your laptop into a spare HDMI connection on your television.



Streaming devices

You can use a streaming device to turn your regular

TV into a smart one. A streaming device plugs into your television so you can watch streaming services or on-demand services (such as ABC iView or SBS On Demand).

Some well-known streaming devices you may have heard of include Google TV, Apple TV, Amazon Fire TV Stick and Google Chromecast.

Before you do anything, check your TV to confirm that it has an HDMI port. You'll find it on the back or side of your TV (see image at right.) Unfortunately if your TV doesn't have an HDMI port, you won't be able to connect a streaming device, gaming console or laptop.

"If you have home broadband and a spare HDMI connection on your TV, then you could buy something like an



You can also use a games console like a PlayStation or Xbox, or a set-top box like a Fetch TV box, instead of a streaming device. All of these devices connect to your TV via the HDMI port as it delivers both the audio and video over a single cable.

HOW TO SET UP YOUR NEW 'SMART' TV

Once you've bought the hardware, it's time to start watching! Well, almost. There are a few steps to take before you can settle down with your favourite series.

Firstly, you'll need an email address to sign in (or set up an account) to watch free-to-air channels' on-demand services. Then you'll need to decide if you'd like to pay for a streaming subscription service like Netflix or Stan or sign up for a free-to-air on-demand service like ABC iView. Once you're set up for free and/or paid watching, here's what to do:

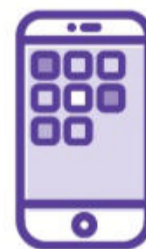
- 1 Plug the streaming device into a spare HDMI input, and plug the other end (USB cable or power cable) into the power point or USB power adapter.
- 2 Turn the TV and the streaming device on and select the HDMI input that your streaming device is plugged into, using the TV remote. You should then see a screen on the TV asking you to set up your device.

Amazon Fire TV Stick 4K or Google TV 4K for \$100," says CHOICE TV expert Denis Gallagher.

"If your TV can't handle 4K video, then the non-4K Fire TV Stick and Google TV models are about half the price. There's also an Apple TV option starting from \$220.

"The Amazon Fire TV Stick, Google TV and Apple TV products come with a remote control, which is easy to use and will also allow you to control the volume of the TV."

- 3 Follow the instructions to set up the device. You'll then be presented with a screen showing the free and subscription services available.
- 4 Now you can access all the free-to-air on-demand services, plus streaming subscription services if you've paid for them.



Smartphone

If the streaming services you wish to access are already installed on your phone, you may be able to simply view your smartphone content on your TV.

There are two ways to do this – you can either mirror it or cast it. The two terms are often used together but they actually work very differently.

Mirroring is when you're simply showing whatever is on your phone on your television. This can be both audio and video and is usually delivered over a direct Wi-Fi connection. Many older TVs support mirroring and it can be a handy feature for showing family and friends photos and movies stored on your phone. You can also use mirroring to show streamed content on your television but the experience can be a bit clunky as mirroring simply replicates what's happening on your phone's screen.

Casting is more sophisticated – instead of just showing what's playing on your smartphone, casting sends a link from the app on your phone to your TV. This delivers an experience similar to what you'd expect from a streaming device such as a Google Chromecast or Amazon Firestick, allowing you to control the content either from your smartphone or by using the TV remote.

For casting to work most effectively, both the smartphone (or other smart device such as a tablet) and the television should be connected to the internet via the same Wi-Fi network. ▶



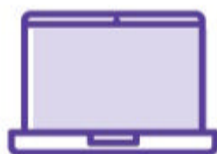
Back of TV showing two HDMI ports (top left).



HOW TO CAST

When watching a Netflix or YouTube video on your smartphone, you may have noticed a small square with multiple lines at the top of your smartphone screen. This is the casting icon which lets you connect the app to a TV.

Click on this square and you'll most likely see your TV or other smart display as a connection option. Once selected, you'll be able to view content streamed from your smartphone app on your TV.



Laptop

An easy way to smarten up a TV is to simply plug your laptop into it. This essentially turns any TV with an HDMI connection into a big-screen computer, making it perfect for watching streamed shows or movies.

Almost all new laptops can connect to a TV via a direct HDMI cable connection (all you'll need to buy is an HDMI cable, which should cost around \$20). This will show the screen directly on the TV, and transmit the audio as well. Some laptops may not have the full-sized HDMI port, but you can also use a USB-C to HDMI cable (about \$20) which will work in the same way.

How to extend the life of your smart TV

If you already own a smart TV but it's getting long in the tooth, you don't need to replace it the second it starts playing up.

Here are a few simple steps to spruce up your old telly:

- If an app is playing up or won't open, delete it and install it again.

- Perform a manual software update for your smart TV via the settings menu.
- Return your TV to the factory default, clearing out all the setting changes you may have made over the years.
- If you can't find an HDMI connection on your TV, it's probably time to go shopping. ■

Why have my TV's apps disappeared?

Old-school TVs had just a few main tasks: pick up signals for free-to-air TV and connect to DVD players or game consoles. You could buy one knowing it would likely last you 10–15 years.

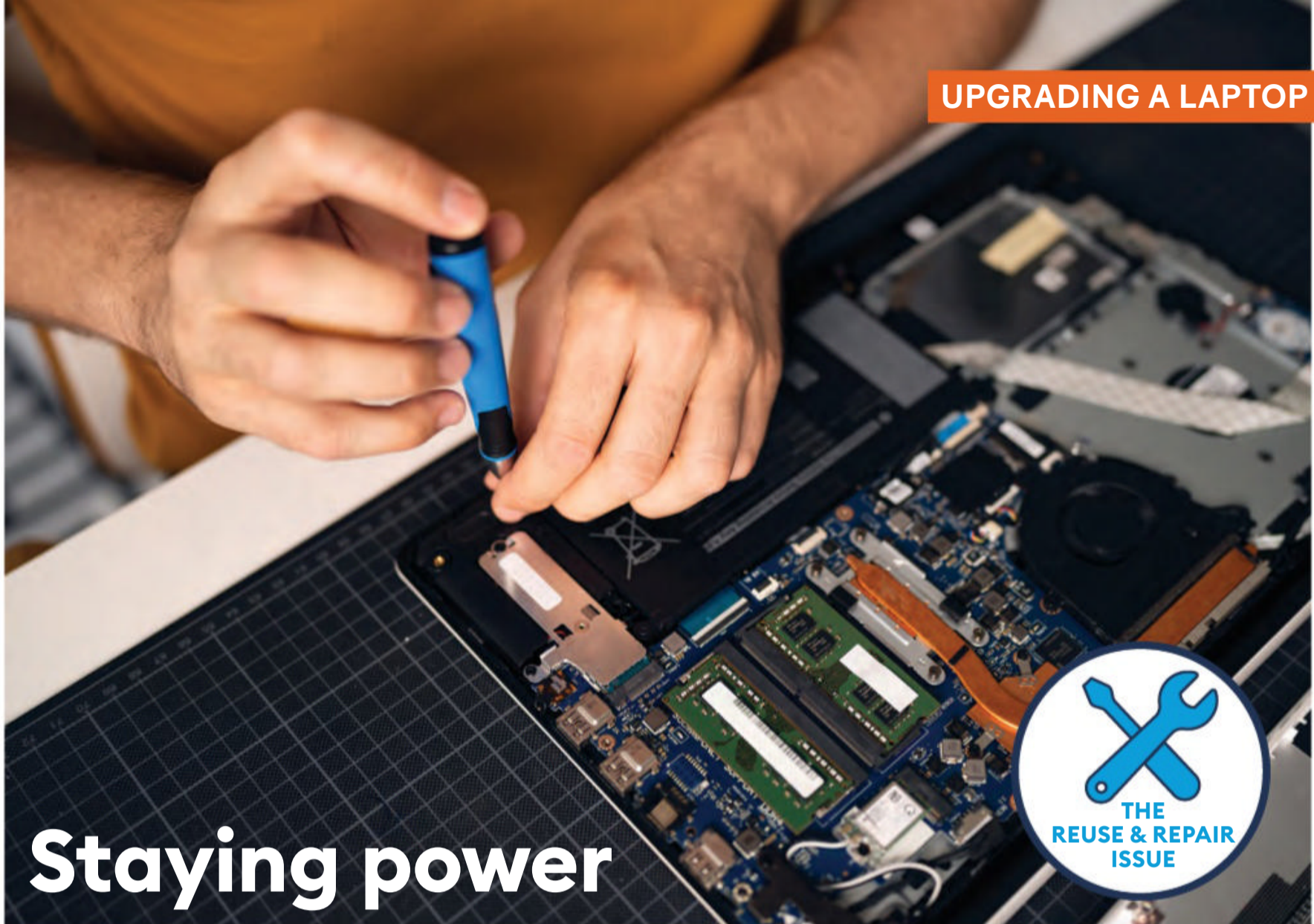
But modern TVs have modern problems. While they may still function for the same length of time as their predecessors as far as video quality is concerned, you're likely to encounter different issues such as apps becoming obsolete and platforms cutting off support for your operating system.

Sometimes this is because streaming services won't update apps designed for older TVs, and sometimes new apps can't be accessed by your TV.

Here are some real examples of support for apps either changing or being removed altogether that you may have experienced:

- In 2019, Netflix stopped working on some early 2010s Samsung and Panasonic smart TVs.
- SBS On Demand was removed from some Sony TVs that weren't using Google's TV software.
- Disney+ launched in Australia in 2019, but some Hisense TVs couldn't support the Disney+ service until late 2021.





Staying power

Improving your laptop's hardware can be an affordable way to give it a power boost. **Alex Angove-Plumb** shows you how

NEED TO KNOW

- Many laptops are designed so that upgrading or modification is impossible without causing damage.
- Modular laptops with customisable, repairable or replaceable parts are becoming more popular.
- Consider whether you need a laptop at all – a tablet might fulfill your needs.

A slow laptop doesn't always have to go straight to landfill or the recycling plant. Stretching out the life of what you have can be better for the wallet, as well as the planet. You might be able to revitalise it without breaking the bank.

With the right information, tools and a little preparation, you could have your old laptop performing even better than new. Or, at least, good enough for the near future.

Can you upgrade your laptop?

The three areas of a laptop you can generally upgrade are the RAM, storage and battery. Most newer laptops have at least some components glued or soldered in place, requiring special tools or professional expertise to repair or upgrade them. With many laptops, the casing is made from one piece of metal, or the parts are unreachable without damaging them, which makes them impossible to upgrade.

But there is hope on the horizon. 'Modular' laptops – those featuring components that

can be swapped out – are a trending topic right now, with some manufacturers focusing on upgradable tech and even marketing their products as such.

These new laptops won't help anyone who needs an upgrade right now, but keep them in mind if you end up buying a new model.

CAN YOU DO IT YOURSELF?

A quick look at the underside will usually tell you if you can upgrade your laptop at home. Check for removable panels that could give you access to the battery, RAM or storage.

Next, search the internet for relevant information on your specific laptop brand and model to find out which parts can be easily changed.

Often you can find a user manual online (if you've lost your original). Be sure to check repair/▶

Before pulling anything apart, make sure you have a full backup of the computer

upgrade videos and even user comments from people who have already done something similar. These will help you find out if you need any special screwdrivers or tools (Phillips, Torx or Pentalobe screwdrivers might be required).

You might even need to buy a whole computer repair kit. These start at about \$20, but they can be much pricier.

Back up before you start

Before pulling anything apart, make sure you have a full backup of the computer, or at least of all your important files. A clone of your old hard drive will give you a quicker recovery of your operating system and programs if anything goes wrong. But there are other options.

If you're replacing your laptop's internal hard drive with a smaller solid-state drive (SSD), you may need to archive files (such as music, movies and photos) to a different drive first. Once you've cloned your



Phillips



Torx



Pentalobe

operating system and programs to the new drive and it's working in the laptop, you can choose which data files and folders to restore.

Upgrading your laptop's RAM

WHAT IS RAM?

Random access memory (RAM) is fast solid-state memory used for running programs. RAM only stores information temporarily, while the computer is powered on. It's one of the main reasons older computers struggle with new programs due to ever-increasing RAM demand.

If your computer struggles when running several programs or multiple tabs in a web browser at once, you could probably do with more RAM.

Usually, a laptop will only have one or two RAM slots available. Sometimes it has a spare, empty RAM slot. If this is the case, you can potentially just buy new RAM and not remove the old, as long as the new RAM is the right type.

Make sure you check online and buy the right RAM for your model. You may be limited in the capacity

of the RAM module you can install, and different types of RAM require different port shapes.

HOW MUCH RAM DO YOU NEED?

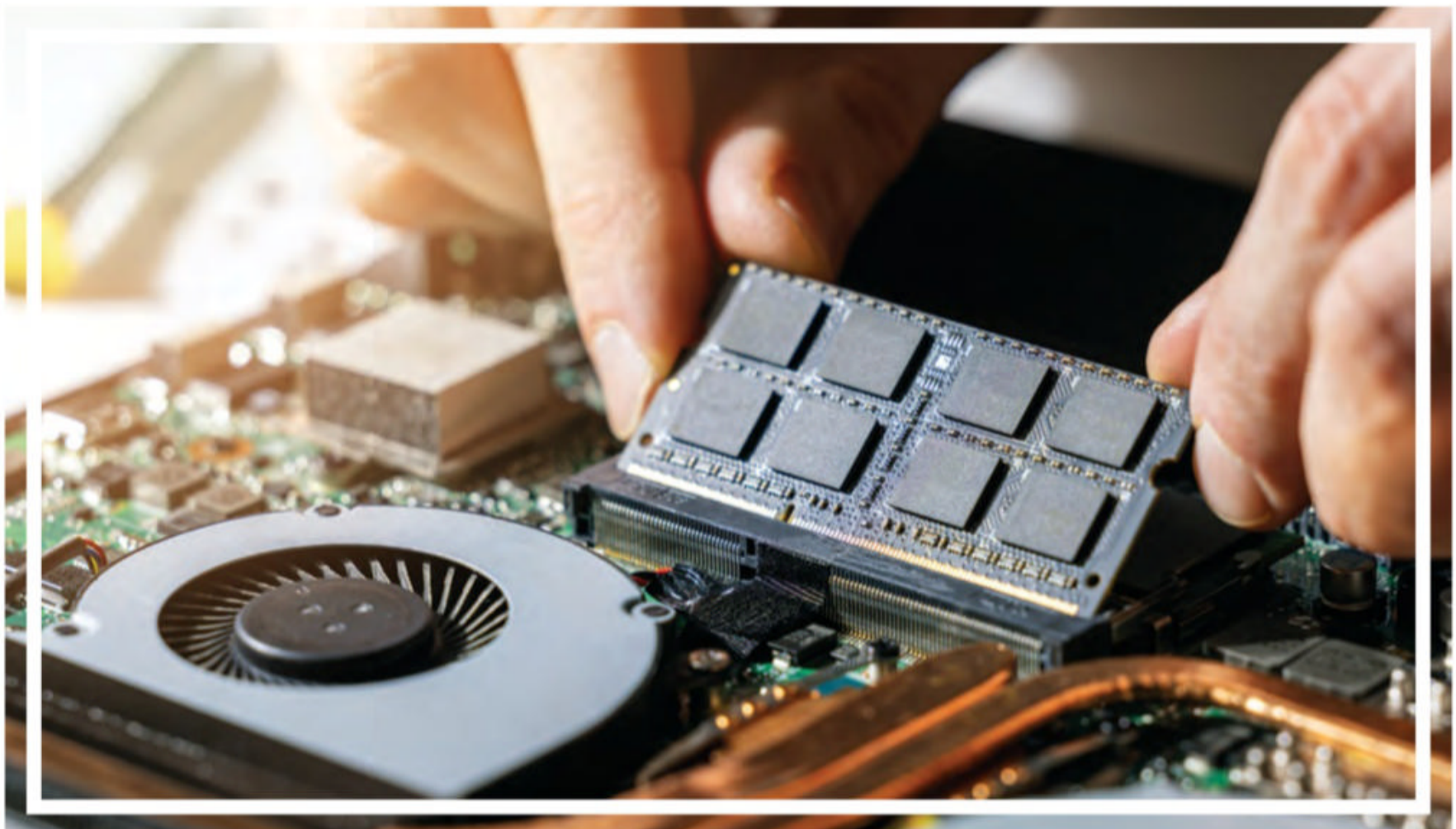
If your laptop has 4GB or less RAM, upgrading to 8GB should get you by for the near future.

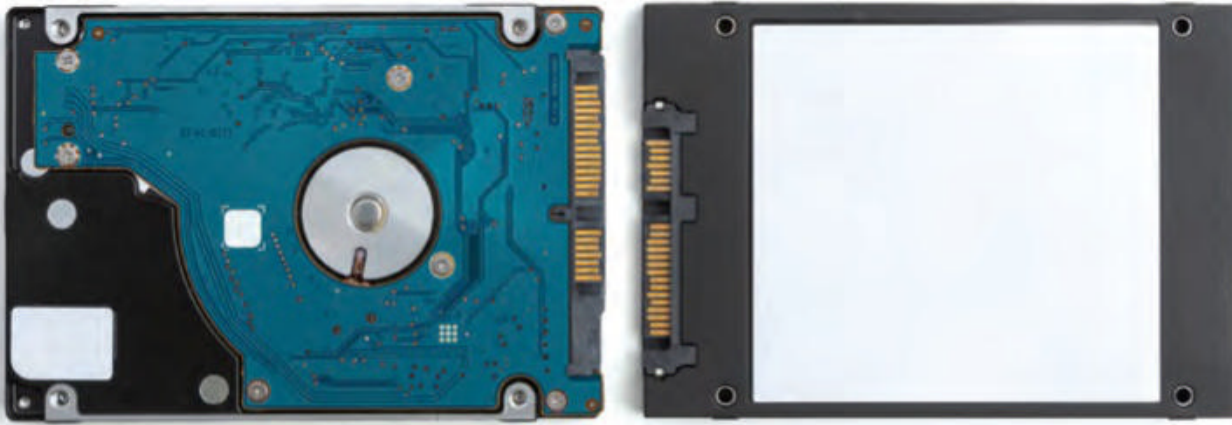
You probably won't need more than 8GB, as any programs that require that much RAM may also need a faster CPU and GPU than your old laptop has, and you probably can't upgrade these parts.

Upgrading your laptop's storage drive

Usually, the easiest way to improve a laptop's overall performance is to replace a hard drive with an SSD, which is much faster.

If you already have an SSD, you can still benefit from upgrading – faster and greater capacity SSD options for your laptop might exist. If your SSD is close to full, this will slow down performance. Storage drives work faster the more free space they have, so a bigger SSD might offer you faster speeds... until you fill it up, too.





HARD DRIVE VS SSD

Hard drives are an older and slower technology. They provide long-term, high-capacity data storage, usually ranging from around 1TB to 2TB (terabytes) in laptops, offering relatively cheap storage.

SSDs are many times faster than hard drives, but they cost quite a bit more per gigabyte. Even if this means you need to downsize, it's often worth doing so to boost performance, especially given how easy online cloud storage is to access these days.

As well as being much faster, SSDs are lighter, use less power (giving longer battery life) and stay cooler than hard drives. In laptops they can usually slot in as a direct replacement without an adaptor. They're also more durable, so any jolts to your laptop are less likely to damage them than a hard drive.

WHAT SIZE SSD DO YOU NEED?

Take a look at your current storage drive and make your decision based on how full it is. A 256GB SSD sits in the sweet spot for a price/capacity trade-off if you stick mostly to productivity software and don't need media storage, though capacity of up to 512GB may also be suitable. SSDs of up to 2TB or more are available, but the escalating cost of the higher capacity drives tends to be prohibitive for general use.

Unless you save everything to the cloud, avoid 128GB drives. After accounting for your laptop's operating system, default programs, drivers and other background software, you'll have very little free space for personal use.

Upgrading your laptop's battery

Laptop batteries wear out quickly. Replacing yours with a fresh one can give you much longer between charges, even though it'll probably

be the same model battery as your old one. It won't

boost performance,

however, unless your current laptop spends a lot of time in power-saving mode.

IS YOUR BATTERY REMOVABLE?

With older laptops that have a removable battery, changing it can be as easy

as undoing the battery lock button/clip, removing the old one and slotting in a replacement.

Unfortunately, many modern laptops aren't designed for this – you need to open the casing and some batteries aren't user-replaceable at all. They may be hidden behind other parts or even glued in place. In that case, it's time for a professional or a new laptop.

A 256GB SSD sits in the sweet spot for a price/capacity trade-off

BEFORE BUYING A NEW BATTERY

Batteries are often designed to fit into a specific laptop, so make sure any battery that you're thinking of buying matches the specifications of your model exactly.

Check whether your laptop's RAM and storage can be upgraded (and if it's worthwhile) before forking out for a new battery. If they can't, consider how long you think you can keep using your laptop before it needs replacing.

What to do if you can't upgrade

If your laptop can't be reasonably upgraded, it's worth considering switching from Windows to a free Linux distribution.

There are plenty of Linux options designed for older or lightweight devices – Linux Lite and Bodhi Linux are just two examples, but have a look around.

If you need to replace your old device anyway, what do you have to lose by trying a different, free operating system?

In the event you do need a new device, consider if you need a laptop at all. For many day-to-day users, a tablet will do quite nicely. This can save you some money while also being more portable. ■





Old tech, new tricks

Recycling old tech is great, but repurposing is even better. **Peter Zaluzny** explains how to give your out-of-date devices a new lease on life

An ageing desktop, laptop, smartphone or tablet may be lacking the grunt required to perform demanding tasks. But old equipment can still be useful for jobs that require a little less processing power.

Smartphones and tablets often find new life as a universal remote to control smart devices and their various apps around the home. You can also use them to play music and videos from streaming services or a home server that can cast to other compatible devices.

It's not uncommon to see an old iPad attached to the wall as a digital calendar or family planner either, and you can save on baby monitors by mounting a phone or tablet with a monitoring app above the cot. While there are plenty of ways to repurpose a smart device you may encounter a few compatibility hurdles. The latest operating system and app updates don't tend to support older devices.

However, you may be pleasantly surprised by how many functions your old smart device can still perform.

New life for a mobile device

BABY MONITOR

Instead of buying a baby monitor, you can purchase and install a monitoring app on an old phone or tablet, as well as on your primary phone. Then, all you need to do is mount the old device nearby or above the cot and you have a perfectly good Wi-Fi baby monitor for a fraction of the price. Phones that have a dedicated monitoring app installed offer most of the same features as a dedicated camera except for pan and tilt.

These apps can also usually connect to other devices on your network, including security cameras. Just remember to keep an eye on the battery or, better yet, leave the phone that is acting as a camera permanently plugged in.

REMOTE CONTROL

An old Android device can make a great universal remote, as long as the apps you require are compatible with the



NEED TO KNOW

- Old smartphones or tablets can be used as remote controls, media players, baby monitors and more.
- Repurposing an old device can save you money and reduce the strain on your main smartphone or tablet.

device's operating system. You can use your old device to control a range of smart devices such as lights, cameras and thermostats, as well as audio and video streaming services.

More and more apps are also adding a remote function that connects to another device, such as



a smart TV or laptop, via Wi-Fi to allow easier navigation than a TV remote. Tapping, swiping and typing on a touch screen is much easier than entering search terms and browsing content libraries with a remote. The content itself is played on the other device, which means your phone or tablet is essentially a Wi-Fi-enabled universal remote. Spotify Connect is a good example.

MEDIA PLAYER



An older smartphone can be repurposed as a digital music player, which can save storage and help preserve the battery life of your main mobile phone.

If you prefer to stream music, throw in a cheap, data-heavy prepaid SIM and stream songs on the go without worrying about going over your limit.

And with a SIM, you can also use the device as a Wi-Fi hotspot in your car and on the road.

New life for an iPad or tablet



FAMILY PLANNER

Repurpose an old iPad or tablet as a family calendar and message board in the kitchen. Sync the family calendars, tasks and to-do lists so everyone knows whose turn it is to take out the garbage and who's busy next Sunday.

KITCHEN SMART DISPLAY



There's no need to shell out for one of those fancy new smart displays for your home appliances. An old iPad or Android tablet can do the same things and it should support the respective digital assistants unless it's particularly old.

Just prop it up and presto, now you can use the tablet as a digital cookbook. Can't quite get your head around a recipe? Fire up an instructional video on YouTube. Or

as you run out of things in the pantry, compile your shopping list on the tablet. Sync it across your account and you'll be able to pull up the list on your phone when at the supermarket.

Repurpose an old iPad or tablet as a family calendar and message board in the kitchen

New life for an old computer

'NEW' HOME SERVER

If you're looking for something a little more advanced, you can turn an old computer into a home server, also known as NAS. Though they have a number of applications, they're typically used for automated backup, home security that connects to your network-enabled security cameras, or as a media server that stores your video, audio or images and makes them accessible on the home network.

The last feature is particularly popular, as media servers can run on low-performance systems. All you really need is a lot of storage, and that's just a matter of upgrading the hard drives. Then, with a bit of networking know-how, you can beam movies, TV shows, music and more

to all your entertainment devices around the house.

Of course, there's always the option to upgrade or replace broken parts but that's only really open to tech-savvy sorts who own desktop 'tower' PCs. And finally, one adult's trash can often be a child's treasure. Tech hand-me-downs are a great way to introduce kids to their first smartphone, tablet or computer before they're old enough (or responsible enough) to own a new model. ▶



Reviving an iPod Classic

There's still plenty of value in this iconic bit of retro tech. In a world of smartphones and constant internet connectivity, an offline media player seems a little redundant. But with an overseas holiday on the horizon, and a phone whose battery isn't what it used to be, I wanted to see if my humble iPod Classic was still up to the task.

It turns out an iPod still has its place in 2023, as a device that can partly remove your dependency on a smartphone for entertainment. Even today, an iPod is still a perfect travel companion.

THE PROS

Despite being close to 15 years old, the iPod still has almost 30 hours of battery life. Not only is this enough for all but the longest international hauls, it means I can put my phone (which barely lasts the day) aside, ensuring that it won't be dead on arrival at my destination.

I'm also not dependent on an internet connection, something that isn't ubiquitous despite what we've grown used to. It could be due to coverage, or costly roaming fees, but mobile data isn't always an option, especially mid-flight.

Now yes, you can use your smartphone for offline listening, but background processes can still quickly drain the battery. That's not an issue for my iPod, which is primarily designed for just one thing.

While there are advantages to the endless supply of songs offered by streaming services, the content glut can be overwhelming. An iPod is limited to music you own which makes browsing considerably easier. You don't need to dive in with a particular plan and may even enjoy coming across an album you haven't listened to in a while.

MAKING MODIFICATIONS

If you're sick of the limitations imposed by iTunes, you can try installing a custom, open-source operating system. I went with Rockbox, one of the more popular alternatives for the iPod classic.

It removes the requirement for music management software so you can just drag and drop files, and expands support for almost all file

formats, including lossless audio such as FLAC. There's even a bunch of unique interfaces available for free.

THE CONS

Of course, there are some hardware drawbacks to using legacy technology. Bluetooth, for example, wasn't added until the 2nd Gen iPod Touch, so chances are you're stuck with wired connectivity alone which may not suit your headphones.

While my iPod is still in good working order, it may not be long before the hard drive conks out or the battery stops holding a charge. Replacing these parts is possible, but tricky, and may even result in permanent damage.

There are also disadvantages to using an offline device. Ripping CDs and manually organising a digital music library is a slow process and may not even be an option, as it's getting harder and harder to find computers with a disc drive. You may have even more trouble finding podcasts that aren't restricted to streaming or playback through specific apps.

But the pros outweigh the cons. Though I can't see my trusty iPod Classic replacing a smartphone and streaming for day to day use, it will be my travel companion until it completely kicks the bucket. ■

Despite being close to 15 years old, the iPod still has almost 30 hours of battery life





Love your leftovers

Worried about rising grocery costs? **Pru Engel** shares some clever ways to use your kitchen appliances to make your meals go further

As food costs continue to rise, making the weekly grocery budget go the distance is becoming increasingly challenging for many of us.

So how can you get on top of your weekly food shopping spend? You can save money and minimise food waste by using your kitchen appliances to turn your lacklustre leftovers and almost-expired produce into delicious second-chance suppers. Here are a few ideas.

Air fryers

Because of their ability to reheat food quickly (they're essentially mini ovens),

Air fryers are great for crisping up and giving new life to many leftover foods

air fryers are great for crisping up and giving new life to many leftover foods, from chicken drumsticks or schnitzels to pies, pizza and leftover vegetables.

If you have nuts that have gone a bit soft, pop them in the air fryer and cook until crunchy for a delicious snack or to add to texture to salads. Got some raw root vegies that are on their way out? Use your air fryer to cook some crispy vegetable chips. Potato, sweet potato and pumpkin are always winners.

Air fryers are also useful when it comes to repurposing your leftovers – turn last night's bolognese into crisp air-fryer mince pasties by

NEED TO KNOW

- These common kitchen appliances can turn leftover bits and pieces into a brand-new meal.
- You can also use your appliances to make use of produce that's past its prime or about to go off.

spooning the leftover bolognese into squares of puff pastry (adding any leftover cooked veg you have to hand) and fold over to seal. Brush with beaten egg and air fry until golden. These are a great lunchbox snack or after-school fuel for kids, or just add a side salad to create a quick dinner.

If you don't already have an air fryer but have been thinking about getting one, you don't have to spend big. Our latest review revealed several models under \$250 that our experts recommend. ▶

IMAGE: GETTY

77%
Sunbeam
AFP4000WH
Copper
Infused
DuraCeramic
Air Fryer



\$179

Our cheapest recommended model gets a very good rating for overall cooking performance, it's easy to clean and there's an audible sound when the timer ends. It can be a little fiddly to use, but its impressive cooking performance and low price make it a smart buy if you think an air fryer could help you to make the most of your leftovers.

76%
Sunbeam 4L
DuraCeramic
Copper Infused
Digital Air Fryer
AFP4100BK



\$199

This model also comes in at under \$200, and although it received a slightly lower rating than the **AFP4000WH** for its cooking performance, it still performs well overall and is easier to use. It also has a larger capacity and is significantly cheaper to run, which means it may actually be more cost-effective over the long term. If you want to make reheating your leftovers a breeze, this model is worth a look. For all the models we tested see *CHOICE* Nov 22.

Slice veg such as carrots, potatoes, onions and celery, then blanch and freeze to use later



Slow cookers

One of the best things about slow cookers is their ability to turn cheaper cuts of meat – chuck steak, oyster blade steak, silverside – into succulent and sustaining dishes.

The slow cooker comes in handy when doubling the quantity of recipes so you can cook one meal for now, and pop one in the freezer for later. You can also use it to make stocks from leftover chicken, beef or lamb bones that you can turn into soup for another day. Just add the bones to your slow cooker with any veg in your crisper drawer that's past its prime – carrots, onion, garlic, celery, leek (it doesn't matter if they're a bit wilted) – then cover with water and simmer all day. It costs a fraction of the price of store-bought stock, it's healthy and it gives you a base for another meal.

Another clever slow cooker hack is for milk that's about to go off – turn it into a rice pudding for a simple cheap and delicious dessert. Add about three cups of milk to approximately 3/4 of a cup of white rice, some sugar and spices such as cinnamon or vanilla – then cook on high until the rice has absorbed the liquid. You can serve with stewed apples or pears, or frozen mixed berries.

If you don't already have a slow cooker, you don't have to spend big bucks to get one. If you choose wisely, you can pick up a high-performing model that scored well in our last review (*CHOICE* Jun 21) for less than \$50 – bargain!

Food processors

There are many ways a food processor can save you money – not least because shredding or dicing your own ingredients, as opposed to buying them pre-prepared (think cheese or pre-shredded veg), is much cheaper. But a food processor can also be used to give new life to your leftovers.

Leftover roasted veg? They'll make a delicious creamy roasted vegetable soup (and if you use that stock you made in your slow cooker it will be even cheaper). Just add all your leftover roasted veg to the food processor, pour in stock and any other seasonings you like – fresh or dried herbs or chilli – and blend until smooth. Add cream if you like, or bulk it out further with tinned pulses or legumes. You could also add less stock and turn this into a vegetable pasta sauce instead. Both options freeze well.

Here are some more ideas to reduce waste and save money:

- If you have spare vegetables that you haven't yet cooked, use your food processor and prep them for your freezer. Slice veg such as carrots, potatoes, onions and celery, then blanch and freeze to use later.
- If you have an abundance of herbs in the garden, or you bought a big bunch on special, process the leftovers in your mini processor with a little oil, then place into small containers to freeze (great for adding later to bolognese, curries or soups). You can also make a pesto: whizz any leftover herbs with a bit of lemon juice, olive oil, garlic and add any type of nut to give it a creamy texture. This is delicious served with fish, chicken or veg, as a pasta sauce or even just as a dressing on a salad.

For the best food processor for your kitchen, see our review in *CHOICE* Aug 22.

Blenders

If you have some pears, apples, bananas or berries that are on their way out – or perhaps the kids have left a few half-eaten pieces of fruit around the place – your blender is the perfect place for them to go (slicing off any bits that have come into contact with anyone’s mouth of course).

A high-powered blender can blitz them into smoothies (just add your preferred milk or coconut water) or freeze into popsicle moulds to make snacks for warmer days. You can also freeze them into ice-cube moulds to make smoothie cubes ready to throw in for smoothies on the go.

Leftover apples and pears can also be cut up and simmered in a small amount of water until tender to make stewed fruit. If you want a smooth consistency, just pop the simmered fruit with a little liquid and pulse in your blender. Store in the fridge for up to three days and serve with yoghurt for a healthy dessert, or with muesli and yoghurt for breakfast.

Here are two of the best value blenders from our latest test.

85% Braun JB9042 PowerBlend 9

(High-performance blender)

This high-powered model makes light work of blending frozen foods, and performs perfectly at chopping veg, blending smoothies, grating cheese, milling nuts and more. It can even convert raw vegetables into hot soup, making it ideal for turning leftover produce into a fresh, hot meal.



87% Ninja Nutri Ninja Pro BL450ANZMN 30

(Personal blender)

The top performing personal blender we tested is also one of the cheapest. While it can only handle up to 650mL at a time, this blender received a perfect score for crushing ice, making a smoothie and blending both soft liquids and coarse, fibrous kale. If you’re looking for more functions like chopping veg, you’ll need to opt for a standard or high-performance model, but this blender is a great option for turning half-eaten leftovers into healthy smoothies or fruit purees.



Sandwich press

When it comes to using up leftovers, there are few things simpler than whacking it all between two slices of bread, adding some cheese and creating a delicious toastie in a sandwich press.

Roast beef is delicious with cheddar or Swiss cheese and some mustard and red onion, or add sliced tomato and some mozzarella to leftover roast chicken (with a bit of mayo or basil pesto, if you like). Then pop it in the sandwich press for a quick, easy and cheap lunch.

Look out for our sandwich press and sandwich toaster review coming soon. ■



IMAGE: GETTY





Whatever floats your oats

Oats and porridge are fast and affordable breakfast favourites, but the options can be overwhelming. **Shadia Djakovic** helps you choose the bowl of porridge that's just right

Who doesn't love a hot bowl of porridge topped with a drizzle of honey on a cold winter's morning? Oats are a fantastic breakfast option but with so many varieties out there, how do you choose which to buy?

To help you make an informed decision, we sifted through more than 70 different types of oats and porridge, focusing on health and cost.

We split our analysis into two categories: porridge, which is usually cooked or soaked overnight, and plain rolled oats, which can be cooked or eaten raw.

Oats are low GI, providing you with energy for hours after you've eaten

In this article, we share the results for the porridges that came out on top for best Health Star Rating and no estimated added sugars, and for the products that give you the best bang for your buck – the cheapest products with a Health Star Rating (HSR) of 5.

If you'd like to compare all 70 products we assessed, visit [choice.com.au/cerealreview](https://www.choice.com.au/cerealreview).

Rolled vs quick vs steel-cut

Whether you choose 'rolled', 'quick' or 'steel-cut' oats depends on how much time you have, and whether or not you're a fan of a nuttier flavour and a chewier texture in your morning porridge.

Rolled oats, also referred to as traditional oats, are produced by hulling then steaming oat grains (also known as oat groats), pressing between rollers and then drying. To prepare them you simply add water or milk, and cook for about five minutes on the stove or three in a microwave.

Quick oats have been pressed thinner than rolled oats. You prepare them in the same way as rolled oats, but they cook faster, and the resulting porridge is smoother.

Steel-cut oats have the outer husk removed and the oat groat cut into pieces using steel discs. They take around 20 minutes to cook, but if you soak them overnight they can take just a couple of minutes in the microwave. They have a nuttier flavour than rolled or quick oats, and a chewier texture.

Top porridges

When looking at porridge options with a Health Star Rating of 5 and no estimated added sugars, these are the ones that came out on top.

Macro Wholefoods Australian 5 Grains Porridge 750g

Serving size: 30g
Protein: 3.4g per serve, 11.3g per 100g
Fibre: 4.1g per serve, 13.5g per 100g
Price: 47c per 100g



Uncle Toby's Quick Sachets Original Big Bowl 368g

Serving size: 46g
Protein: 5.9g per serve, 12.8g per 100g
Fibre: 4.2g per serve, 9.2g per 100g
Price: \$1.58 per 100g



Carman's No Added Sugar Porridge Sachets Natural 5 Grain Super Seed 320g

Serving size: 40g
Protein: 5.3g per serve, 13.2g per 100g
Fibre: 5.24g per serve, 13.1g per 100g
Price: \$2.03 per 100g



Carman's No Added Sugar Porridge Sachets Almond, Pecan and Hazelnut 320g

Serving size: 40g
Protein: 5.9g per serve, 14.7g per 100g
Fibre: 4.3g per serve, 10.7g per 100g
Price: \$2.03 per 100g



Best value oats

Australia's rising cost of living is front of mind for most people, so we've rounded up the cheapest oats we could find (based on price per 100g). We looked at oats closest to a 750g pack size where possible, but there are larger pack sizes available that may be cheaper per unit. All products have a Health Star Rating of 5.

Goldenvale Australian Rolled Oats 750g

Serving size: 50g
Protein: 5.9g per serve, 11.7g per 100g
Fibre: 5.1g per serve, 10.1g per 100g
Price: 17c per 100g



Goldenvale Australian Quick Oats 750g

Serving size: 50g
Protein: 6.4g per serve, 12.8g per 100g
Fibre: 5.7g per serve, 11.3g per 100g
Price: 17c per 100g



Woolworths Australian Rolled Oats 750g

Serving size: 30g
Protein: 3.9g per serve, 13.1g per 100g
Fibre: 3.2g per serve, 10.8 per 100g
Price: 19c per 100g



Woolworths Australian Quick Oats 750g

Serving size: 30g
Protein: 3.9g per serve, 13.1g per 100g
Fibre: 3.2g per serve, 10.8 per 100g
Price: 19c per 100g



Black & Gold Quick Oats 750g

Serving size: 35g
Protein: 4.6g per serve, 13.2g per 100g
Fibre: 4.1g per serve, 11.7g per 100g
Price: 35c per 100g

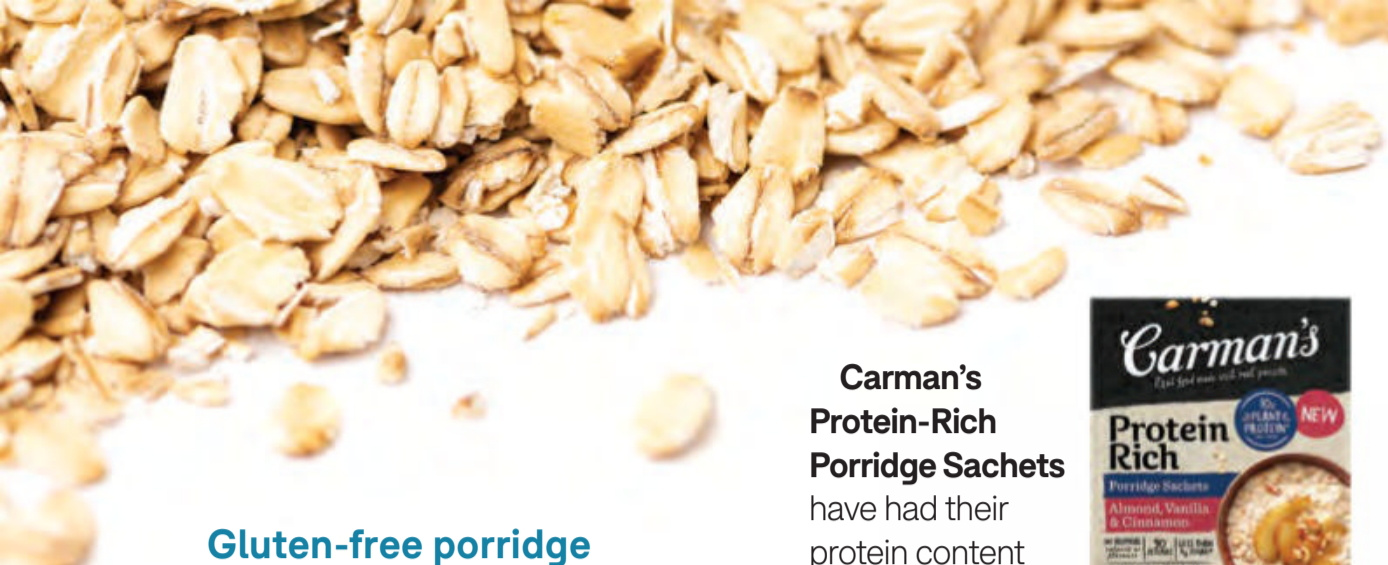


Are oats good for you?

Oats are rich in beta-glucan, a soluble fibre that helps keep your blood cholesterol down. They're also low GI, which means their carbohydrate is slowly absorbed into your system, providing you with energy for hours after you've eaten. And they're packed with B vitamins, vitamin E, protein and minerals. Eating oats is associated with protective effects against heart disease in adults.

Whether they're steamed and rolled like traditional or quick oats, or chopped up like steel-cut oats, all oats are complete whole grains. They all have the bran (the outer layer which is a good source of fibre, omega-3 fatty acids, vitamins and minerals) and the germ (the smallest part of the grain rich in vitamin E and other vitamins and minerals) intact – meaning that they all have similar nutritional properties. ▶





Gluten-free porridge

These days there's a good variety of gluten-free options on the porridge shelf and we saw products with ingredients ranging from brown rice flakes and buckwheat to almond meal. These options do range in nutritional content, so if you're looking for a gluten-free porridge that's nutritionally similar to oats, go for the **Orgran Quinoa Porridge**, which has similar compositions of protein, fibre and carbohydrates.



WHEAT-FREE OATS

Wheat-free oats have been grown away from any gluten-containing crops like barley so there's no cross-contamination. However, according to the Food Standards Code, these oats aren't allowed to be labelled gluten free. Wheat-free oats can be consumed by people with a specific wheat allergy or intolerance to wheat, but not by those with coeliac disease (where gluten is the issue). If you'd like to find out if eating oats will affect your coeliac disease, speak to a doctor.

Flavoured varieties

Most of the porridge oats you can buy in supermarkets receive an HSR of 5. The exceptions are the various flavoured instant and quick oat varieties. These are usually high in sugar – as much as 19.9g per 100g, compared with about 1g per 100g for traditional options – and this can knock their HSR down to 4 or lower.

Nutrition boosts

The more fibre and less sugar a food product has, the more favourable its HSR. Some porridge and oat products have added ingredients to boost their nutritional value.

Carman's Protein-Rich Porridge Sachets

have had their protein content boosted to a whopping 23% through the addition of wheat protein. These sachets contain more than double the average protein content of the other porridges we looked at (but if you're sensitive to gluten, give them a miss).



In the oats category we saw products with boosted protein, fibre, omega 3 and cholesterol-lowering abilities thanks to healthy ingredients such as oat fibre, wheat protein, plant sterols, linseeds and chia seeds. All of

the nutritionally boosted products we reviewed had an HSR of 5, so if you're after a specific nutrient boost give them a go, but be prepared to pay double the price as the average price per 100g is \$1.20 compared with 60 cents for regular oats.

How we got our results

We categorised a wide range of breakfast cereal products and collected their label data. We then calculated Health Star Ratings and used the George Institute for Global Health's FoodSwitch app to determine added sugars per 100g. For porridge, we looked at the Health Star Rating and added sugars per 100g, and for oats we looked at price alone. ■



Money for nothing



Brosa customers who shopped using buy now, pay later services before the furniture retailer's collapse face extra challenges getting compensation, writes **Andy Kollmorgen**

The collapse of online furniture retailer Brosa late last year, and its rapid acquisition by Kogan, left some Afterpay and Zip Pay users facing ongoing withdrawals from their accounts earlier this year, with little hope their orders would ever arrive.

And although the buy now, pay later (BNPL) businesses told us in late February they were contacting affected users and offering refunds, many frustrated users have reported a different version of events.

Missing goods

When Brosa fell into voluntary administration in December 2022, about \$10 million worth of orders remained undelivered, leaving about 5290 people out of pocket. Kogan quickly acquired the company, paying \$1.5 million for a business that had previously been valued at \$60 million.

It later emerged that around 2790 of the out-of-pocket customers bought goods that couldn't be found in warehouses. That meant neither the goods nor a refund would be forthcoming. (Brosa administrator KordaMentha has referred to the missing items as non-identified or unallocated goods.)

Refund confusion

Due to mixed messages from service providers, there has been confusion about whether affected customers who shopped using buy now, pay later services should be seeking refunds from the BNPL service or from their banks.

While many Afterpay users said they were still waiting for their refunds as of late March, and Afterpay said refunds were on the way, an Afterpay spokesperson also told CHOICE that using their ▶

NEED TO KNOW

- After Brosa went out of business in late 2022, thousands of customers who'd paid for goods were informed they'd be getting nothing.
- Some Brosa customers who'd shopped using Afterpay and Zip Pay continued to have payments deducted for items they'll never receive.
- Meanwhile, some customers who are eligible to receive the Brosa goods they ordered say new owner Kogan is overcharging for delivery.



service does not override the protections that come with credit and debit cards, including access to chargeback schemes.

“Since Afterpay only allows customers to pay with either a credit or debit card, customers are subject to the same protections they would have had had they used their payment cards directly with the retailer,” the spokesperson said.

“This means that if a customer buys an item using Afterpay and is making payments with a debit card, then the customer is afforded the protections offered by their debit card issuer.”

Several customers have said that they disputed Afterpay transactions through their banks (the card issuer) and were able to secure a refund. But at least one user reported that Afterpay was disputing their chargeback request and that they remained uncompensated.

And the Zip Pay customers we’ve heard from said their requests for refunds remained unanswered as of late March. Given the degree of frustration affected customers have been expressing in recent

months, it seems likely that many BNPL users are still waiting to get their money back.

Compensation runaround

Despite what some Afterpay and Zip Pay users have been reporting, the businesses told us they’re providing refunds.



WHAT ZIP SAYS

According to a Zip spokesperson we spoke to in late February, the company was working with Kogan to identify which Brosa customers would not be receiving their orders and was taking steps to ensure that they are reimbursed.

“Where Kogan has advised customers that they are not able to honour the purchase, or provide adequate compensation, Zip is refunding customers. Where payments have been made by impacted customers, those payments will be refunded,” the spokesperson said.

afterpay

WHAT AFTERPAY SAYS

Along with encouraging its customers to use their credit or debit card chargeback schemes, an Afterpay spokesperson said there’s a policy in place to protect customers and manage refunds in cases of merchant insolvency.

“This policy involves working with the insolvent merchant, the administrators, and – in instances of the sale of the business – the new owner of the business, to achieve a best-case resolution for customers. This can involve reallocation of available stock, store credit with the new business owner, or issuance of a goodwill refund by Afterpay. All customers in this situation have been contacted and offered a resolution.”

The Afterpay spokesperson added that customers who are not eligible for a credit with Kogan and have provided proof of unallocated stock have been offered a goodwill refund. The company said customers who have not been compensated can lodge a dispute with Afterpay at its self-service portal, though one Afterpay user said on social media, “open a dispute with them and they will be hopeless in getting back to you or helping you”.

ANGER ON SOCIAL MEDIA

Despite both companies making assurances in recent months that refunds are on their way, the real-life experience of customers paints a different picture. Many Afterpay and Zip Pay users have taken to social media to vent their frustration.

“Afterpay has told me to suck it up, and Zip Pay has been sending me in circles,” said one Brosa customer.

Another customer wrote: “I had one payment left which I asked Afterpay to stop as I would not be



receiving the purchase and the final payment came out anyway.”

The anger on social media has a recurring theme – Afterpay is difficult to get in touch with, and they’re no help if you do manage to get in touch.

Tony (name has been changed) a user of both Afterpay and Zip Pay, told us both services have subjected him to a lengthy runaround, though Afterpay finally came through with a refund.

“My partner and I have had horrible experiences with Zip and Afterpay regarding refunds for unallocated stock,” Tony says.

“We have since received a refund from Afterpay even after they originally closed the dispute and said there was nothing they could do. But our dispute with Zip is still ongoing and they have us running around in circles. We are still awaiting an outcome and are just totally appalled by the lack of customer service and support from this business.”

Katia Sanderson, the director of financial counselling with the Consumer Action Law Centre in Victoria, says callers to the National Debt Helpline often report receiving poor hardship responses from their buy now, pay later provider.

“Unfortunately, I am not surprised to hear that some customers eligible for a credit are not being heard,” Sanderson says.

Kogan delivery of Brosa goods comes at a cost

Customers who bought goods from Brosa before it went bust and have been told their merchandise will be delivered are presumably in a happier place than those still paying off goods they’ll never receive. But these ‘lucky’ customers have reported in recent months that Kogan’s delivery charges have taken the joy out of finally getting their furniture.

As part of the deal brokered by administrator KordaMentha, Kogan agreed to arrange the delivery of outstanding Brosa orders, in cases where those orders could be found. Kogan tentatively agreed that any delivery costs on top of what customers had already paid Brosa would be ‘reasonable’ and only applied in ‘limited circumstances’.

But Kogan ultimately decided not to offer store credits and to charge delivery fees in all circumstances. And in recent months, some of the recipients of these goods have voiced outrage at the delivery fees Kogan is reportedly charging, which in many cases are two to three times higher than the original fees paid to Brosa.

Annabel tells us she originally purchased a sofa from Brosa in October 2022 and considers herself lucky that her order was found after Kogan took over. But she’s not happy about the \$444 Kogan is charging for delivery.

“The main issue I have with this charge is that not only is it more

than the non-wholesale quotes I have found online, but it is three times what they would charge anyone purchasing the same item now. And I live in Coogee, which is generally considered Sydney metro.”

KOGAN RESPONDS

Despite the customer outrage, a Kogan spokesperson says the company isn’t marking-up delivery costs.

“Kogan sympathises with customers who are dealing with the fallout of how the Brosa business was previously managed by the prior owners. Kogan has not received any proceeds from previous orders, and is doing everything it can to help get allocated stock to customers.”

“Kogan has used its scale and volume to offer customers the most cost-effective delivery options. Unfortunately the bulkier the item, the more it can cost to deliver. The fact is Kogan has passed on the wholesale cost of each delivery with zero mark-up.” ■

Some of the recipients of these goods have voiced outrage at the delivery fees Kogan is reportedly charging



IMAGES: GETTY/ BUSINESSNEWSAUSTRALIA.COM/ARTICLES/POTENTIAL-BUYERS-POUNCE-ON-STRUGGLING-ONLINE-FURNITURE-BRAND-BROSA.



NEED TO KNOW

- Robot vacuums are expensive but most only offer one to two-year warranties.
- Many consumable parts are replaceable, but batteries can be costly.
- Only buy from official Australian retailers as the apps from other retailers may not work locally.

Sweeping solutions

Robot vacuums are increasingly popular, but be aware of ongoing maintenance costs, says **Kim Gilmour**

With most robot vacuums costing well over \$1000 these days (and some upwards of \$2000), you'd expect to get several years of robust use out of them. So it's disappointing that most manufacturers only provide a one-year warranty, or two at the most. Typically, the warranty doesn't cover consumable accessories like brushes, mop pads and filters, or issues caused by your robot accidentally running over something it shouldn't. Some warranty terms also seem frustratingly unclear, such as a clause in iRobot's terms which states they "will not cover faults due to normal wear and

tear with reasonable use". Thankfully, you'll be covered for any major failures under Australian Consumer Law, regardless of these relatively short guarantee periods.

Reliability and replacement parts

When CHOICE surveyed robot vacuum owners about reliability in 2020, battery problems were a common complaint. If you're using your robot vac every day, expect the lithium-ion battery to eventually need replacing, which could cost up to \$169 if it's outside the warranty period. Other reliability-related issues reported included poor suction and

the robot failing to work altogether. When it comes to prolonging the life of your robot vacuum and getting the best performance out of it, regular maintenance such as cleaning or washing the filters, removing hair from brushes and wiping the sensors can help. You can also buy new parts for many robots, such as brushes and filters (a "replenishment" kit for iRobot models containing brushes and filters costs \$119–149, depending on the model).

Maintenance and app support

Maintaining the mechanics of your robot over time is one thing, but you also need to keep an eye on how long the manufacturer will support app updates. You'll need to keep your smartphone's operating system (Android or iOS) up to date, as app support may eventually be discontinued for older versions. While robot vacuums can generally still clean without an app, you'll need one to access all the functions such as scheduling, viewing maps, checking battery status, cleaning reports and setting power levels, as well as bug fixes. Beware, too, of cheap branded robot vacuums which may in fact be imported from overseas markets. In 2022, robot vac company Dreame announced it was placing a regional app block on models bought outside of Australia or from unofficial resellers, saying "you will not be able to sync your device with the

'Mi Home' mobile app, and therefore, cannot use features provided through the app".

The increasing reliance on apps to access the robot vacuum's functions means we've now incorporated their ease of use into our test method, which includes ease of connecting the vacuum to your Wi-Fi and ease of accessing the app's features. We've also scored how easy it is to empty the bin, and models are penalised if they can't reach under low furniture.

Hard floors vs carpet

Our tests continue to find that robot vacs perform much better on hard floors than carpet. The hard floor cleaning score of the worst performing model is still better than the carpet cleaning score of the best rated model in our test. For a house with mostly hard floors, a robot vac will do a reasonable job of keeping the floors clean when run daily, though a more thorough clean

Robot vacs perform much better on hard floors than carpet

with a standard vacuum (or a broom) may still be needed occasionally.

When it comes to carpet, robot vacs can do a decent surface-level clean, but because they don't generate the suction of a standard vacuum, a lot of dirt is left below the surface and over time this can damage the pile.

In a home with carpeted floors, a robot vac is fine for a tidy, but the carpet will need a regular going-over with a standard vacuum to get most of the dirt out.

PET HAIR

We've found robot vacuums can pick up a reasonable amount of fluff (such as pet hair) off hard floors, but on carpet they can push the remaining dirt deeper into the pile.

DO ROBOT VACS GET STUCK?

It depends. Sometimes, if you've got a mixture of rugs and hard floors, they might have a little trouble travelling from one surface type to the next. Tassels or fringes on rugs, home entertainment cables and deep carpet pile could be problematic as these can get tangled in wheels or brushes. With a bit of preparation, you can avoid these incidents. ▶



How we test robot vacuums

For our hard floors test, our expert Matthew Tung scatters a set amount of sand over a vinyl floor in a room with chairs and benches set up for the robot to work around. We then let the robot complete its cleaning cycle until it returns to its dock. Dirt pick-up is measured at specified intervals. For our carpet test, sand is dispersed over a set area of carpet and the amount collected is weighed at the end of the test. Pet hair is also embedded into carpet and we visually assess how much is left after six minutes. For corners and edges, we note how close to the wall the robot can clean and how well it sweeps up sand in a right-angled corner.

HIGH-END CLEAN



82% iRobot Roomba s9+

If you want to buy the top performing model in our test, you'll need to decide whether it's worth splurging \$2899 on a robot vacuum. If you don't have much carpet, there are some great performers that'll do a similar job for a fraction of the cost. So, what do you get for the price? There's the self-emptying docking station which has a claimed capacity of 30 robot bins (although this will take up more floor space). The app offers you functions such as scheduling which rooms are to be cleaned, and when, and you can also define "keep out zones". We tested the machine a couple of years ago, so we haven't looked at the app upgrades since then, which include the ability to customise your cleaning preferences for particular rooms in the house (such as giving the kitchen a thorough clean, but a light clean for the guest room). You can also control the suction power (low, medium, high) on the app and decide how many passes you want of the area.

Shop Ethical rating

BRAND	RATING
Roborock	F
Samsung	F
Xiaomi	F

NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see p73.

GOOD-VALUE VAC



76% iRobot Roomba i2

Despite its relatively low cost, this model is actually one of the best allrounders we've tested recently. It's excellent on hard floors, OK on carpet, and good at pet hair pick-up too. Connecting the robot to your Wi-Fi network and navigating the app's features is easy. While there aren't any sophisticated functions like automatic dirt dispensing or radar mapping, it still does its core job of cleaning your floors well. One limitation is that if you want to allocate no-go zones for the robot vacuum you'll need to purchase physical infrared towers (\$125) as you can't define them on the app.

APP-FREE CLEANING



66% Eufy Robovac 11S T2108

Poor carpet cleaning performance stops this cheap and cheerful vacuum from being recommended, but it's still excellent on hard floors, so if you don't have carpet it could be worth considering. Some members say that the unit may need "rescuing" from various obstructions like curtains and wires but this is a common problem with robot vacuums and can be largely avoided with some preparation. This vac is one of the only current models we've tested that doesn't use an app and includes a physical remote control. The remote can be used to program cleaning times and it'll go back to base to charge when its battery is low.



Features to look for

STAIRS DETECTION

Helps the robot sense when it has reached a ledge or step so it can back off.

VIRTUAL WALL

An invisible barrier used to block off open doorways or other areas you don't want the robot to enter.

PROGRAMMABLE TIMES

Allows you to set times of the day or week to run the robot.

AUTOMATIC DOCKING

When the battery is low the robot vacuum finds its way back to the charger. All the models in our test do this.

RUNNING TIME

You'll want a robot vacuum that can clean your whole floor before returning to the charging station.

NOISE LEVEL

Robot vacuums are generally quieter than standard vacuums, but some have an annoying high-pitched whistle and others make a mechanical grinding noise.

MOPPING FUNCTION

Some robot vacuums also have a mopping function, but these are best suited for light stains only.

SELF-EMPTYING

Robots with this function have an automatic dirt disposal unit on the charging base. When the robot goes back to charge, the dust bin gets emptied which saves you from having to continually empty the tiny dust bin.

REMOTE CONTROL

Some models still come with a physical remote control but these days many will only use apps.

Recommended	Price (\$)	PERFORMANCE								SPECIFICATIONS					
		CHOICE Expert Rating (%)	Hard floor dirt pick-up score (%)	Dirt removal from carpet score (%)	Cleaning corners and edges score (%)	Pet hair removal score (%)	Ease of use score (%)	Noise measured on carpet / hard floor (dBA)	Charge time (min)	Measured battery life (min)	Weight (kg)	Origin	Warranty (yr)	Year tested	
✓ iRobot Roomba s9+	2899	82	99	60	70	90	nt	65 / 70	ns	111	4.2	China	1	2020	
✓ iRobot Roomba i2	599	76	94	59	70	70	77	55 / 62	180	81	3.1	China	1	2023	
✓ iRobot Roomba j7+	1799	76	96	54	70	70	82	54 / 61	180	74	3.4	China	1	2023	
✓ iRobot Roomba e5 e5150	999	75	99	47	80	60	nt	53 / 60	180	94	3.3	China	1	2019	
iRobot Roomba 692	499	73	98	42	80	60	nt	59 / 64	180	95	3.4	China	1	2022	
✓ iRobot Roomba i3+	1399	73	95	62	70	40	nt	55 / 61	180	81	3.2	China	1	2022	
✓ iRobot Roomba i7 (i7150)	1499	73	96	54	70	50	nt	57 / 62	180	78	3.4	China	1	2020	
iRobot Roomba 670	499	72	93	45	70	70	nt	59 / 64	180	121	3.4	China	1	2019	
✓ iRobot Roomba i7+ (i7550)	1899	70	97	55	50	50	nt	59 / 62	180	75	3.2	China	1	2020	
✓ Roborock S7+	1499	70	96	56	70	30	nt	66 / 70	360	80	4.5	China	1	2022	
Eufy RoboVac 11S T2108	399	66	92	43	40	70	nt	54 / 58	300–360	34	2.7	China	1	2019	
Ecovacs Deebot N8 Pro	799	65	95	34	50	70	67	58 / 62	240	64	3.7	China	1	2023	
Roborock S5 Max	999	65	91	35	50	70	nt	60 / 62	ns	99	3.5	China	1	2020	
Ecovacs Deebot T9+	1299	62	91	26	50	70	nt	56 / 64	390	79	3.6	China	1	2022	
Neato Botvac Connected DC00	896	62	86	41	50	50	nt	64 / 66	120–180	54	3.7	China	1	2019	
Roborock S6	799	62	93	31	50	50	nt	59 / 59	ns	102	3.6	China	1	2020	
Samsung Jet Bot AI+	1899	62	98	33	50	25	78	56 / 60	210	99	4.4	Vietnam	2	2023	
Xiaomi Mi Robot Vacuum-Mop 2 Pro	598	62	84	22	70	80	70	59 / 61	110	121	3.6	China	2	2023	
Ecovacs Deebot X1 Plus	1899	60	95	22	50	50	72	56 / 65	390	64	3.7	China	2	2023	
Eufy X8 Hybrid	1299	58	95	17	50	50	nt	64 / 65	240–300	68	3.5	China	1	2022	
Dreame DreameBot D10 Plus	999	57	88	19	40	70	75	64 / 70	360	120	3.1	China	1	2023	

TABLE NOTES Recommended We recommend robot vacuums that earn a CHOICE Expert Rating of at least 70% and at least a borderline (46% or higher) performance score on carpet. **Price** Recommended retail as of March 2023. **CHOICE Expert Rating** For models tested before 2023, this consists of the performance score only, which includes hard floor dirt pick-up (40%), dirt removal from carpet (30%), cleaning corners and edges (15%) and pet hair removal (15%). For models tested from 2023, the CHOICE Expert Rating is 90% performance and 10% ease of use. **nt** Not tested. **ns** Not stated. ■

IMAGE: GETTY

Get with the program

Wash cycles are getting longer as water efficiency improves, but how long is too long? **Ashley Iredale** says a shorter program may suit your needs



NEED TO KNOW

- Not all programs are suitable for full loads – shorter programs may only be suitable for much smaller loads, but most of us only wash around 3.5kg of clothes at a time anyway.
- Gentle programs use less harsh mechanical action, and compensate by sluicing a lot of water through your laundry instead.

Do you have a whole day for laundry or, like the rest of us, are you so time poor you can barely snatch a minute to sneak a load in between work, school runs, doing your taxes or heaven forbid, getting a few minutes' rest?

Beating your laundry clean in the river is so 1850s, because your washing machine is here to help – just throw everything in, push a button and the machine does the

rest. You can kick back and wait ... and wait ... and wait some more, because while washing machines are using less water and energy to get your clothes cleaner, some are also taking longer and longer to do so.

What's with the longer cycle times?

In a word, water efficiency. OK that's two words, but the point is, the more water-efficient a cycle is, the longer it takes. As manufacturers squeeze better performance out of less water, we're seeing cycle times on the cottons program – sometimes the only one capable of washing a full load – blow out to three to four hours in some cases.

We're big fans of front loaders for their superior soil removal, efficiency, and gentleness on clothes, but when it comes to cycle time, top loaders win out because they typically get the job done a lot faster, averaging just under an hour in our test (compared to just

over two and a half hours for front loaders). The trade-off, other than worse washing performance of course, is that top loaders use much more water, an average of 124 litres in our reviews, and up to 224 litres for one machine we tested. By comparison, the average front loader uses just 56 litres per wash.

There are now shorter alternatives to the marathon cottons cycles

The everyday cycle

The less water and energy a washing machine uses to wash a full capacity load, the higher energy and water star ratings it will receive, making it more attractive to shoppers. So, the ultra-long but ultra-efficient cottons cycles are likely here to stay – if only for the sake of a higher star rating.

Thankfully though, manufacturers are listening to consumers' litany of laundry lamentations and including shorter alternatives to marathon cottons cycles. Unlike other programs designed for specific clothing types, these 'everyday' programs promise to perform similarly to the cottons program, but with a far shorter cycle time. But do those claims stack up?

We test washing machines using the cottons program because our survey data shows that it's what most people use. ▶



FRONT LOADER CYCLE COMPARISON

Wash program	Cottons	Everyday	Quick	Delicates
Cycle time (minutes)	111	69	22	49
CHOICE Expert Rating (%)	78	75	60	63
Dirt removal score (%)	79	72	54	58
Rinse performance score (%)	97	87	46	75
Gentleness score (%)	55	62	72	70
Water efficiency score (%)	74	82	92	75
Spin performance score (%)	73	67	48	29

But the increasing emergence of an ‘everyday’ program on water-efficient front loaders piqued our interest, so we decided to put them to the test. We chose a front loader and compared its cottons program with its everyday, quick and delicates programs for cycle times and a handful of performance measures. Bear in mind that when we test washing machines for our reviews we always do at least two runs of the test cycle. For this mini experiment we only did one run.

used for washing only a couple of kilos of not-very-dirty clothes.

While these results are not representative of other machines, we encourage you to experiment with your own washing machine. If you don’t have time for a longer cycle, you may find that you’re just as happy with the results from a shorter wash. But remember, some shorter cycles – delicates programs in particular – will probably use more water than other cycles.

The everyday program scored almost as well overall as the cottons program, but was significantly faster. So, based on our test conditions, the everyday cycle is likely to be quite a good option. As you’d expect, the quick program was fast but at the expense of wash performance – this program is best

A delicate balance

The delicates program helps preserve your less robust items of clothing and manchester by using less agitation and mechanical action. Instead, it cleans your clothes by sluicing larger volumes of water through your laundry. Considering the extra water use, you probably don’t want to be using this typically shorter cycle to simply save time.

Delicates programs also use lower spin speeds, which means your clothes come out a little wetter than normal. This shouldn’t be a major concern because if your clothes are delicate enough to require a gentle program, chances are you’re not putting them in a dryer, which uses more energy drying wetter clothes because it has more work to do.

Gentle or delicate programs may only be suitable to wash a couple of kilos of clothes – it varies between machines, but you certainly won’t be able to wash anywhere near the maximum capacity of the machine. Again, not so inconvenient, because most of us would struggle to fill a full capacity load of delicates anyway.



LESS WEAR AND TEAR, BUT MORE MICROPARTICLES?

Potential extra water use is one drawback to using the delicates or gentle cycles, but another issue to consider is microparticles.

Microparticles, and in particular microplastics, are minute clothing fibres that are released from your clothes while washing and make their way into our oceans and ultimately the food chain. Synthetics in particular are increasingly becoming an environmental issue – so much so that plastic microparticles have been found in the breastmilk of Inuit mothers living above the Arctic Circle.

Counterintuitively, gentle and delicates cycles may release more microparticles from your clothes than regular cycles. According to a study from Newcastle University in

the UK, it's the large volume of water flushing through that releases the microparticles. And although other studies refer only to mechanical action and chemical stresses being the driving force, it seems reasonable

to assume that microparticle release is affected by the volume of water passing through the clothes, as well as the mechanical and chemical stresses of the wash cycle.

The good news is that washing machine manufacturers are taking the microparticle

problem seriously and are working on solutions, such as internal microparticle filters. However, the majority of microparticles are released from clothing during the first three or four washes so the onus may eventually fall on clothing companies to pre-wash their products and capture any particles released.

Manufacturers are taking the microparticle problem seriously and are working on solutions

In the meantime, you can help by avoiding fast fashion made from cheap materials in favour of longer lasting, high-quality garments, not over-washing your clothes, and being conscious of the impact your laundry habits have on our environment. ▶

Shop Ethical rating

BRAND	RATING
AEG	C
Asko	F
Beko	C
Bosch	D
Electrolux	C
Fisher & Paykel	F
Gorenje	F
Haier	F
Kmart Anko	C
LG	C
Miele	B
Panasonic	F
Samsung	F
Siemens	D
Simpson	C
Westinghouse	C
Whirlpool	C

NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see p73.

BEST OVERALL



\$1499

83%
Bosch WGA244U0AU
9kg front loader

BEST TOP LOADER



\$1499

73%
LG WTG1434VHF
14kg top loader

BEST ON A BUDGET



\$949

82%
Samsung WW85T554DAW
8.5kg front loader

IMAGE: GETTY

		COSTS		PERFORMANCE							SPECIFICATIONS								
Recommended	Model	Price (\$)	Running costs (\$/10 years)	CHOICE Expert Rating (%)	Dirt removal score (%)	Rinse performance score (%)	Gentleness score (%)	Water efficiency score (%)	Spin efficiency score (%)	Brand reliability score (%)	Water used (L, normal cycle)	Cycle time (min, normal wash)	Woolens cycle (machine / hand washable)	Out-of-balance correction	Extra rinse	Tap connection	Capacity (kg)	Claimed dimensions (cm, H x W x D)	
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FRONT LOADERS	✓	Bosch WGA244U0AU	1499	624	83	86	93	66	86	75	90	45	222	✓/✓	✓	✓	C	9	85 x 60 x 59
	✓	LG WV9-1412W	1499	1042	83	87	96	63	82	68	88	52	278	✓/✓	ns	✓	HC	12	85 x 60 x 66
	✓	Miele WCA 020	1549	526	83	83	91	72	88	79	86	41	158	✓/✓	✓		C	7	85 x 60 x 64
	✓	Miele WWD 120	2049	606	83	84	96	63	85	76	86	48	160	✓/✓	✓	✓	C	8	85 x 60 x 65
	✓	Bosch WAW28440AU	1849	579	82	84	92	60	88	73	90	42	215	✓/✓	✓	✓	C	9	85 x 60 x 59
	✓	Miele WVG360 WCS	2799	658	82	81	94	63	86	80	86	46	186	✓/✓	✓	✓	C	9	85 x 60 x 65
	✓	Miele WVG660	2799	660	82	85	96	57	84	78	86	49	158	✓/✓	✓	✓	C	9	85 x 60 x 65
	✓	Samsung WW12TP54DSH/SA	1449	750	82	84	89	61	86	81	87	46	159	✓/-	ns	✓	HC	12	85 x 60 x 65
	✓	Samsung WW85T554DAW	949	819	82	83	96	59	80	84	87	55	166	✓/-	✓	✓	HC	8.5	85 x 60 x 55
	✓	Bosch WAX32K41AU	2899	656	81	83	92	58	84	81	90	49	168	✓/✓	✓	✓	C	10	85 x 60 x 64
	✓	LG WV10-1412B	1699	1073	81	83	96	62	78	78	88	59	262	✓/✓	✓	✓	C	12	85 x 60 x 66
	✓	LG WV9-1410W	1299	798	81	80	90	69	83	78	88	51	173	✓/✓	✓	✓	HC	10	85 x 60 x 62
	✓	Miele WWD 660	2399	756	81	82	98	60	76	79	86	63	189	✓/✓	✓		C	8	85 x 60 x 65
	✓	AEG LF8C8412A	1999	666	80	80	95	64	77	77	79	61	129	✓/✓	✓	✓	C	8	85 x 60 x 63
		Beko BFL7510W	949	626	79	84	89	56	81	67	79	54	132	✓/✓	✓	✓	C	7.5	84 x 60 x 64
		Bosch WAV28M40AU	2099	578	79	80	89	62	85	76	90	47	153	✓/✓	✓	✓	C	9	85 x 60 x 64
		Electrolux EWF9042R7WB	1499	748	78	78	95	61	72	78	82	71	136	✓/✓	✓		C	9	85 x 60 x 66
		Fisher & Paykel WH1160F2	1999	713	78	79	97	55	74	73	82	66	111	✓/-	✓	✓	HC	11	85 x 60 x 68
		Fisher & Paykel WH8060J3	999	629	78	78	93	62	78	69	82	59	124	-/-	✓	✓	C	8	85 x 60 x 59
		Fisher & Paykel WH8060P3	1099	823	78	81	97	56	71	73	82	72	127	✓/-	✓	✓	C	8	85 x 60 x 65
	Fisher & Paykel WH8560P3	1199	872	78	83	98	51	69	74	82	76	127	✓/-	ns	✓	C	8.5	85 x 60 x 66	
	Fisher & Paykel WH9060P3	1299	851	78	80	97	56	70	78	82	74	127	✓/-	✓	✓	C	9	85 x 60 x 66	
TOP LOADERS		LG WTG1434VHF	1499	753	73	80	85	35	73	79	88	69	91	-/-	✓	✓	HC	14	103 x 69 x 73
		Fisher & Paykel WL1068P1	1999	839	70	71	91	46	58	73	82	95	55	-/-	✓		HC	10	106 x 69 x 70
		Haier XPB60-287S (Twin tub)	799	758	69	75	90	35	65	63	na	82	74	-/-			HC	6	92 x 74 x 44
		LG WTG6520	799	956	67	73	94	49	45	53	88	120	58	✓/-	ns	✓	HC	6.5	96 x 59 x 61
		LG WTG7520	799	834	67	70	93	41	56	56	88	98	58	✓/-	✓	✓	HC	7.5	96 x 59 x 61
		Fisher & Paykel WA8560G1	1299	987	66	65	96	49	45	69	82	119	43	✓/-	✓		HC	8.5	108 x 60 x 60
		Haier HWT09AN1	1099	856	66	65	90	52	53	59	na	104	57	✓/-	ns	✓	HC	9	102 x 58 x 59
		Haier HWT80AW1	949	929	65	65	93	46	52	54	na	106	55	✓/-	✓	✓	HC	8	97 x 58 x 59
		LG WTG8521	1079	853	65	69	92	35	55	56	88	101	56	✓/-	✓	✓	HC	8.5	102 x 64 x 67
		Haier HWT08AN1	999	1174	64	68	95	47	31	56	na	145	68	✓/-	✓	✓	HC	8	102 x 58 x 59
		Fisher & Paykel WA1068G2	1599	1318	63	64	98	48	21	70	82	162	53	-/-	✓		HC	10	105 x 69 x 70
		Samsung WA12A8376GV	1249	1060	63	64	93	51	37	56	87	134	59	-/-	✓		HC	12	114 x 70 x 75

TABLE NOTES Recommended We recommend front loaders with a CHOICE Expert Rating of at least 80% and at least 80% for dirt removal. We recommend top loaders with a CHOICE Expert Rating of at least 70% and at least 70% for dirt removal. We don't recommend machines with less than 55% in any score. **Price** Recommended retail, as of March 2023. **CHOICE Expert Rating** is made up of dirt removal (40%), rinse performance (20%), gentleness (15%), water efficiency (15%), and spin efficiency (10%). **Brand reliability** where we have statistics, is taken from our 2021 Brand reliability survey, but doesn't add to the overall score. These scores refer to the brand only, not that particular model. Differences of three percent or more between brands are significant. **Tap connection C** Machine connects to cold water only, **HC** Machine needs both hot and cold water connections. **Dimensions** are for the smallest box that fits around the machine, as stated by the manufacturer. **na** Not applicable or not available. **ns** Not stated. ■



Simply smart

Simple mobiles can last a long time but may be rendered unusable after 2024 following the 3G mobile shut down. **Denis Gallagher** looks at some options

The 3G mobile network is being progressively shut down so mobile users are forced to move over to 4G and 5G. Most smartphones produced in the past few years already offer support for the various 4G frequencies available in Australia. However, the situation for simple mobiles (flip phones and bar phones) is not as clear and you should check to see if your current mobile or the model you're looking to buy not only supports the 4G network but also multiple frequencies to ensure you get good reception over a wide area.

Multiple frequencies ensure you get good reception over a wide area

Check your frequency

All three carriers (Telstra, Optus and Vodafone) use the 1800MHz frequency, with additional support for 2100MHz, 2600MHz and 900MHz frequencies being rolled out. Other 4G frequencies available for Optus and Telstra users include 700MHz, while Vodafone is using the 850MHz frequency. An online search for '4G connectivity in Australia' will provide you with the latest in an ever-changing world of network frequency use for each mobile network.

All models we tested support the 1800MHz frequency, and all but the Telstra EasyCall 5 support the

900MHz and 2100MHz frequencies. The Telstra EasyCall 5, Flip 3 and Doro 70XIUP phones lack support for the 850MHz frequency, while the Doro and Swissvoice C50s don't support the 700MHz frequency. ▶

NEED TO KNOW

- 4G network support is a must-have for your simple mobile to avoid reception issues.
- Don't throw out your old smartphone: you may be able to 'simplify' it for an older or younger member of your family.

What to buy

RECOMMENDED



72%

Swissvoice C50s

Contact: southernphone.com.au
*(SIM card and plan costs extra)

This is a simple smartphone that runs on an Android OS. But a custom app or 'skin' overlay helps simplify a series of tasks. A five-inch display shows a single home screen with basic buttons for messages (SMS), photos and phone calls. A carer can add photo icons for the most important people in a contact list and also monitor and remotely control the various settings of the phone. However, the carer also requires a reasonable level of tech awareness to use the web monitoring apps.

A base station charges and stores the mobile and allows for hands-free use. Both the base station and the phone have an SOS button.

At \$648 it isn't cheap, and overall performance and the camera aren't particularly impressive. Also, the actual Android mobile has been around for a few years now and may be showing its age. But you do get an all-in-one simple smartphone without being required to pay for ongoing subscriptions to operate it, although there are extra features on offer for

a fee. If you do sign up for the mobile and Optus plan offered on the website, note that 700MHz support (an important frequency option) is not available with this device.

OTHER SMARTPHONE OPTIONS

The **BigPurplePhone**, which just missed out on earning a recommended score, is still worth considering if you need that extra level of support. The device used is a fairly recent Nokia G50 mobile, with a custom overlay that protects the end user from the complexity of an Android operating system. There are several apps on the screen that are simple to access and easy to operate, with a camera (still photos and video chat), apps for talking and text as well as apps for news, weather, playing music, and a big red SOS button for emergency situations. You also get one-click access to your COVID check-in and vaccination certificate details.

The BigPurplePhone is not available as an outright purchase; you buy it on one of two plans – a basic talk and text plan for \$30 per month, or on a plan that offers more extensive support for \$60 a month with an associated app that can be used by other family members to access the

phone's settings. A charging cradle is also available for around \$50, making this a good all-in-one solution with support, but it does come with ongoing costs.

A cheaper alternative is the **Aspera AS6**, a standard smartphone, which is neither powerful, fast, nor has a fantastic camera, but has a large display and a low price point.

FLIP AND BAR PHONES

The **Olitech EasyFlip 2** and **Opel TouchFlip** are a couple of solid options to consider. Both have a small screen indicating an incoming call, time and alarm that can be seen when the clamshell is shut, which is very handy. To answer an incoming call simply open the flip phone, and when finished close the phone to hang up. The Opel TouchFlip also includes the WhatsApp program and performs well for SMS with predictive texting.

The **Opel EasyBigButton 4G** is a fairly simple to use bar phone with large, clear numeric buttons. It comes with a charging cradle, a configurable SOS emergency button and good support for the various 4G frequencies, making it a good option for any of the three mobile networks.





Repurposing an old smartphone

With a few adjustments, you can turn an old smartphone into a simple phone for seniors or children. For Android phones, each brand follows slightly different steps. For example, for older Samsung and LG mobiles, the 'simple phone' feature can be found by going to **Setting > Display > Home screen > Select home > Easy mode**, while Oppo phone users can find the feature by going to **Setting > Home screen > Home screen mode > Simple mode**.

Most Android smartphones can also be transformed into a simple phone by installing an interface or

'skin' that can be downloaded from the Google Play Store. There are a range of apps that reduce the complexity of the standard screen and show large icons, big text by default, and introduce a series of limitations to help reduce complexity. We've tested **Senior Safety Phone App**, **Big Launcher** and **BaldPhone** and found all to be OK overall and well worth a look at as they're available for free.

Apple's closed iPhone OS makes it difficult to use an overlay or 'skin' to make the home screen look simpler, but Apple fans would argue that's because it's simple to use anyway. Firstly, make sure you carry out a full

factory reset as you don't want any of the previous phone's personal data to be accessed. Next, move all the apps that won't be needed away from the home screen and then lock the home page. Under **Settings > Accessibility** you can change a range of visual and audio settings to optimise the home screen and menus for vision and hearing-impaired users.

Test out a few different functions with the app installed before handing the phone over to the person under your care to make sure it will perform as you'd expect.

Recommended	Price (\$)	Mobile phone type	PERFORMANCE									SPECIFICATIONS													
			CHOICE Expert Rating (%)	Vision score (%)	Dexterity score (%)	Sound receiving score (%)	Sound sending score (%)	SMS score (%)	Manual and support score (%)	SIM (taking in and out) score (%)	Maximum ringer volume (dBA)	Maximum speakerphone volume (dBA)	Configurable emergency button	USB type	WhatsApp support	Predictive text	Voice assistant	Menu font adjustable	Hearing aid support	Camera resolution (MP)	Total storage (GB)	Battery capacity (mAh)	Screen size (inches)	Weight (g)	Warranty
✓	Swissvoice C50s	648	S	72	75	74	59	80	75	64	80	70	60	✓	M	✓	✓	✓	✓	8	8	3200	4.9	162	1
	BigPurplePhone Family&Friends with Tabletop Fast Charger	809	S	69	65	67	75	65	75	74	100	71	88	✓	C					48	128	5000	6.8	250	1
	Olitech EasyFlip 2	199	F	69	73	72	57	70	70	76	40	88	56	✓	M				✓	2	0.13	1000	2.8	123	1
	Opel TouchFlip	149	F	67	70	68	50	70	85	76	30	76	67	✓	M	✓	✓		✓	2	0.51	1400	2.8	130	1
	Aspera AS6	149	S	66	75	66	50	67	80	49	30	59	58		M		✓	✓	✓	8	2	2950	6	196	1
	Aspera F42	99	F	66	68	58	73	63	80	56	30	66	63		M	✓	✓		✓	2	0.51	1350	2.8	127	1
	Opel EasyBigButton 4G	129	B	66	70	63	60	65	80	57	30	67	57	✓	M		✓		✓	5	0.51	2000	3.5	133	1
	Opel FlipPhone 6	99	F	66	68	68	55	70	70	76	30	81	57	✓	M				✓	0.3	0.13	1350	2.4	99	1
	Telstra EasyCall 5	129	B	66	70	66	62	73	65	49	40	69	61	✓	M				✓	na	4	1800	2.8	128	2
	Olitech EasyMate 2	179	B	65	73	64	55	65	65	76	30	82	56	✓	M				✓	2	0.13	1000	2.2	112	1
	Opel BigButton M	129	B	65	70	65	52	70	65	80	40	81	56	✓	C				✓	2	0.13	1000	2.2	111	1
	Aspera Rugged R40 4G	149	R	63	68	59	65	50	80	56	30	65	56		M	✓	✓	✓	✓	2	0.51	2500	2.4	162	1
	Doro 780X IUP	460	B	63	75	64	62	65	40	44	40	71	65	✓	M		(A)		✓	2	4	1600	2.8	118	2
	Telstra Flip 3 4G	119	F	59	60	68	62	53	70	0	40	71	61		M				✓	2	4	1600	2.8	128	2
	Nokia 225 4G	70	B	58	60	58	52	53	80	44	40	60	63		M		✓			0.3	0.19	1150	2.4	91	2

TABLE NOTES Recommended We recommend mobile phones with a CHOICE Expert Rating of 70% or more. **Price** Recommended retail at March 2023. **Type S** Android smartphone, **B** Bar or candybar design, **F** Flip or clamshell design, **R** Ruggedised or tough phone. **CHOICE Expert Rating** is made up of vision (25%), dexterity (25%), sound receiving (20%), sound sending (15%), SMS (10%), manual and support (5%). Vision score is assessed in relation to sight impairment. Dexterity looks at carrying and using the phone with less able fingers. SIM score is part of the dexterity score. Manual and support score assesses the ease of understanding and reading the manual and whether there is phone support available. **USB type C** USB-C, **M** Micro. **(A)** Cannot send texts (can receive). **na** Not available. All mobiles we tested have a micro USB connection and microSD card for storing photo and video, except the Telstra EasyCall 5 which has no camera for photos or video. The Telstra EasyCall 5 is the only model without support for Bluetooth, and the Telstra EasyCall 5 and BigPurplePhone can't do multimedia messaging (MMS). All support the 4G networks (although not all support all available frequencies) and all include a standard 3.5mm headphone jack except the Olitech EasyFlip 2. All were made in China except for the Nokia 225 4G, which was made in Vietnam. ■

Can't get no satisfaction



Which telco has the happiest customers?
Isabel Lam and **Denis Gallagher** find out

Earlier this year, CHOICE commissioned an Australia-wide survey to find out what consumers think of their telco provider. We asked over 2000 people to rate their internet service provider (ISP) and mobile service provider (MSP) on a number of criteria including overall satisfaction, value for money and network reliability. Three new criteria were included in this year's survey: data privacy and security measures; sustainability and ethical conduct; and connection speed relative to price (for ISPs only).

Staying put

Despite the prevalence of compare and switch websites, it seems many of us refuse to switch providers, even if we aren't happy with their service.

Telstra continues to be the largest ISP and the largest mobile network provider, with strong representation in regional areas and is the ISP of choice for the older generation. A significant number of customers in our survey also indicated Telstra has been their ISP for over 10 years. But while you might assume that this longevity is due to customer satisfaction, you'd be wrong. Telstra received low ratings for overall satisfaction, tech support and value for money.

NEED TO KNOW

- Our survey found that consumers who are dissatisfied with their internet service provider don't necessarily switch to a new service.
- Customers of smaller providers are happier overall than Optus, Telstra and Vodafone customers.

Optus has also enjoyed a surprising level of loyalty from their customers, despite being rated worst among all ISPs for data privacy and security by a large margin (no doubt due to their data breach last September).

It seems that instead of trying to provide a high-quality service, Telstra and Optus are banking on consumers' historical tendency to stick with the devil they know.

Only 11% of people surveyed had switched their ISP in the last year, with many deciding to stay despite wanting to switch, citing a significant level of hassle in making the move as the main reason for staying put.

Home broadband/ISP

We asked people how satisfied they were with their ISP across 11 categories that covered things like connection speed and reliability, ease of set-up, customer support, latency, connection speed relative to price, data privacy and sustainability. **ISP WITH THE MOST-SATISFIED CUSTOMERS**

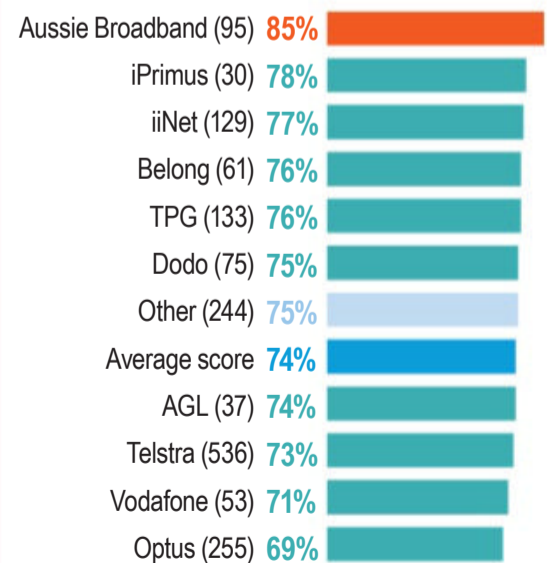


Aussie Broadband topped this category for the second year running, receiving the top score across all 11 categories.

Interestingly, the two largest home internet providers – Telstra and Optus – were among the lowest scoring for overall satisfaction.

Unsurprisingly, considering the rising cost of living, connection speed relative to price was a very important consideration for consumers when choosing an ISP. Data security was also considered important, with several high-profile data breaches in the last year no doubt highlighting the issue. Sustainability and ethical conduct didn't really rate as a reason for selecting an ISP, although it was a higher priority for Gen Z.

Overall customer satisfaction



Based on 1648 respondents who knew which ISP they were with. Numbers in brackets show how many people answered for that brand.

Mobile service provider (MSP)

We asked people how satisfied they were with their MSP across 11 categories covering things like network reliability and coverage, internet speed and connectivity, value for money, bill clarity, data privacy and sustainability.

THE NUMBERS GAME

As far as customer numbers go, Telstra and Optus are still at the top of the market, together claiming about half of SIM-only plans and over 70% of mobile plans that include a handset. While Vodafone's market share lags behind that of Telstra and Optus for phone plans with a handset, they are still the only significant 'other' player in this space. One notable finding from this year's survey is that Vodafone is no longer the significant 'other' for SIM-only plans, with Aldi Mobile now the third most popular SIM-only plan with 9% of the market, ahead of Vodafone at 8% and Amaysim at 7%.

Problems with MSPs

The most commonly reported problems with MSPs were:

- Network coverage (12%)
- Internet connection (9%)
- Internet speed (9%)
- Call reception (8%)
- Frequent internet/network connection drop outs (8%)
- Increase in price/charges (7%)
- Poor customer service (7%).

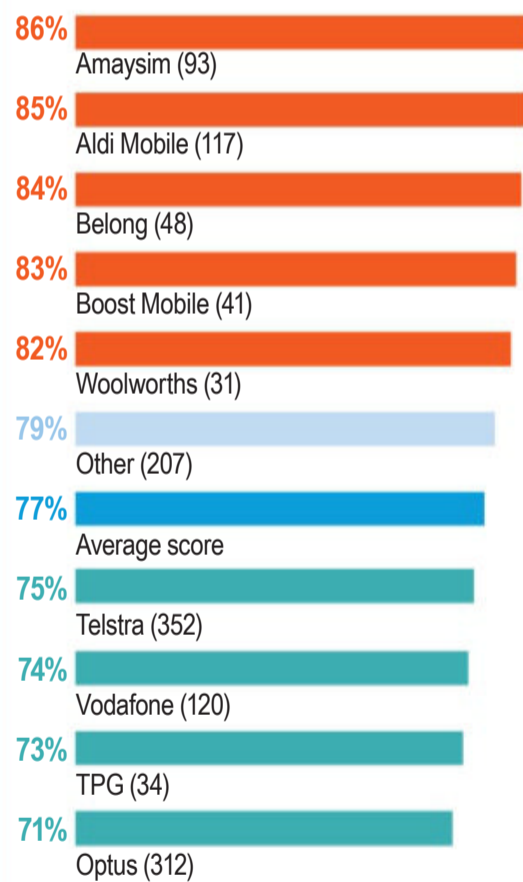
SIM-ONLY MSP WITH THE MOST-SATISFIED CUSTOMERS

There wasn't much between the top five MSPs in terms of overall satisfaction scores. **Amaysim** came out on top, closely followed by **Aldi Mobile, Belong, Boost Mobile** and **Woolworths**.

On the whole, the smaller players performed significantly better than the big three (Optus, Telstra and Vodafone) for overall satisfaction, regardless of the mobile network being used.

It's worth noting, however, that **Amaysim** was the clear winner for customer service and support.

Overall customer satisfaction



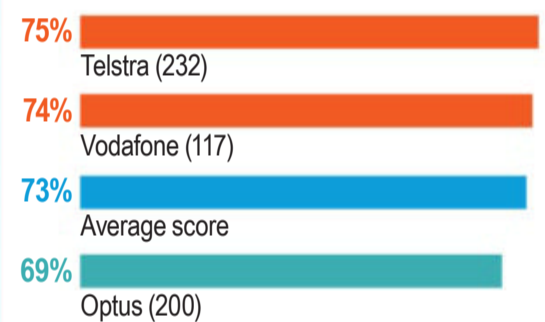
Based on 1355 people who knew which MSP they were with and had a SIM-only plan. Numbers in brackets show how many people answered for that brand.

SIM + HANDSET MSP WITH THE MOST-SATISFIED CUSTOMERS

Of the three SIM + handset MSPs we gathered enough data to report on, **Telstra** had the most satisfied customers overall (75%), followed by **Vodafone** (74%) and **Optus** (69%).

Telstra scored significantly higher than the other two providers for network reliability (79%), internet connectivity/coverage (79%), and network coverage (79%). But its value for money score (66%) was the lowest, behind Vodafone (72%) and Optus (69%).

Overall customer satisfaction



Based on 573 people who knew which MSP they were with and had a SIM + handset plan. Numbers in brackets show how many people answered for that brand.



About this survey

Providers for which we had 30 or more respondents stating current usage are included in our scores. Providers for which we had fewer than 30 respondents are grouped into the aggregate category 'Other'. Respondents were asked to rate their service provider

on a seven-point scale from terrible to excellent. This was converted to a satisfaction score out of 100.

The average score refers to the category average and includes not just the brands listed but all other brands that had a sample of fewer than 30 respondents. ■



Brave new audio

A digital radio can do a lot more than just pick up broadcasts. **Denis Gallagher** explains how these handy gadgets work

Digital radio or DAB+ has chalked up more than ten years in Australia but it still hasn't managed to replace AM or FM as the radio broadcast of choice for many households. However, DAB+ does offer some advantages over standard analogue broadcasts and continues to widen its coverage, particularly in the capital cities. Unlike music streaming services like Spotify, digital radio is broadcast rather than sent over a wireless network. This means

that just like analogue radio, you don't need to worry about having internet access to enjoy the service.

Most major analogue stations simultaneously broadcast (simulcast) in digital, which means you can pick up major stations like Triple M or KIIS on both your digital radio and FM tuner. But there are a number of stations available exclusively in digital as well. These are usually offshoots from big broadcasters with a more specific genre focus such as ABC Jazz, Nova 90s and SBS PopAsia.

NEED TO KNOW

- Many digital radios can perform double duty as a wireless speaker or FM radio.
- Dedicated digital radio stations can be targeted to particular genres and pop-up stations can even be created for special events.

IMPORTANT NOTE

Digital radios that support standard DAB won't work in Australia. Make sure any digital radio you buy supports DAB+ (it should be written on the box and radio), especially if you're buying a radio from overseas.

Why buy a DAB+ radio?

If you're looking to buy a new radio, it's worth grabbing one that supports DAB+ and Bluetooth. The potential for improved audio quality and the ability to deliver information such as the artist name and song title,

album art and even the weather gives DAB+ some significant advantages over analogue radio.

A DAB+ radio will not only let you listen to a large range of stations, but you can also connect your phone or other smart device to the radio and stream music from your favourite subscription service such as Spotify, YouTube Music or Apple Music.

Check before buying

Before parting with any money, you need to make sure that digital radio is available in your area. Though it's been rolled out in all capital cities, coverage is less consistent in regional areas. Head to the Digital Radio Plus website (digitalradioplus.com.au/can-i-get-digital-radio) and enter your postcode to see if you can tune in. The site also provides maps of city regions, showing the areas with good reception and where it's marginal.

Almost all DAB+ radios in Australia, including all the models in our test, support FM radio transmission, but very few can pick up AM broadcasts. ▶

What to look for

DAB+ presets: Let you quickly select your favourite station.

Internet radio support: These models come with Wi-Fi so you can listen to one of thousands of online stations, as well as podcasts. They also give you the option to stream audio directly from a local server (via DLNA) or music streaming services such as Spotify.

Remote control: Change stations and settings from the comfort of your armchair. If a remote control is included we assess it as part of the overall ease of use.

Bluetooth: Lets you use your digital radio as a wireless speaker.

USB port: In some cases this can be used to play digital music files stored on a USB drive, but it's often just an input for firmware updates. The table indicates what the port is for on the models we tested.

AUX input: Handy if you want to connect other devices without dealing with Bluetooth.

Alarm: Useful for waking up in the morning, but can also be used to remind you when your favourite program is about to start. DAB+ clock radios are more accurate than normal clock radios and automatically adjust for daylight saving changes.

Line out: You'll need this if you want to connect your radio to external speakers or a more powerful sound system, via an amplifier or receiver.

Screen size and shape: Look for screens that are big enough to read.

Before buying, you need to make sure that digital radio is available in your area



BEST OVERALL



80% JBL Tuner XL

If you want a bit more audio punch than the average DAB+ radio, then this is the model for you. It performed well in our listening test, with excellent DAB+ reception and it's easy to use. It doesn't have a headphone input, but you do get a 3.5mm auxiliary input as well as USB-C and Bluetooth connectivity, giving you the option to play music from a range of sources such as a media player, your smartphone or a USB stick (although this may require a USB-C adapter).

Unfortunately, if you want it to perform double duty as an alarm clock, this isn't the model for you, as there is no alarm option and the clock doesn't display in standby mode.

BEST CLOCK RADIO/ALARM



80% Ruark R1 Mk4 Deluxe

This stylish radio not only delivers good-quality audio, it also offers multiple alarms and a clock, making it a good option beside the bed or in the kitchen. A Li-ion battery pack (\$135) which attaches to the back of the radio and remote (\$35) are available as optional extras.

A headphone input allows you to listen without disturbing others and, like the **JBL Tuner XL**, this model also has a 3.5mm auxiliary input, USB and Bluetooth connectivity.

Another option to consider if you want an alarm/clock with reasonable audio quality at a more affordable price is the **Sangean DPR-45**. It is also one of the very few DAB+ radios available with AM radio support.

BEST FOR PEOPLE WITH DEMENTIA



79% Relish Radio (AC-02)

This model aims to give elderly people and those living with dementia the independence to enjoy music and audiobooks on a device they can operate themselves. It's not as quick or easy to set up as some digital radios we've tested, but the initial setup is usually carried out by the carer not the user, and once it is complete, using the device is extremely simple. Some nice touches, such as clear station selection and a simple yet effective USB music playlist, make this a unique (if expensive) offering for people wanting to connect with music on their own terms without all the bells and whistles. There is no clock or alarm, but as the focus for this product is simplicity this could be seen as a positive rather than a drawback.

How we test

Reception is assessed in three different locations. The first site is classed as optimal reception, while the second site represents an area of marginal reception. The final test takes place in an area with limited reception due to its distance from the broadcast tower and lack of line of sight between the signal and the radio. The reception score is based on the results for the marginal and difficult reception results.

Standby energy is assessed with the unit in standby mode. Models that record a measurement greater than 1W score 40%. Those that record more than 2W score 0%.

Sound quality is assessed with a panel listening to two pieces of music (rock/pop and electronic), with the speaker positioned about two metres away from each of the listeners.

Ease of use includes assessment of initial set-up, labelling, placement and functionality of the buttons, controls and knobs as well as the size and clarity of the display. Our testers also look at whether the button layout of the remote (if available) is intuitive and logical, with a distinctive size, colour and shape to help make selections in low light.

Recommended	PERFORMANCE				SPECIFICATIONS															
	Type	Price (\$)	CHOICE Expert Rating (%)	Listening score (%)	Reception score (%)	Ease of use score (%)	Standby energy score (%)	Number of DAB+ presets	Internet radio	Remote control supplied	Bluetooth	USB	Line-in (AUX)	CD player	Alarm	Number of speakers	Rechargeable battery	Dimensions (cm, H x W x D)	Weight (kg)	Warranty
✓	JBL Tuner XL	P	249	80	73	90	70	100	5		✓	✓	✓			1	✓	17 x 14.5 x 10.5	1.1	1
✓	Ruark R1 Mk4 Deluxe Bluetooth Radio	B	475	80	75	90	76	80	8	(A)	✓	✓	✓		✓	1	(A)	18.5 x 13.3 x 16	1.4	3
✓	JBL Tuner 2	P	169	79	73	90	67	100	5		✓	(B)	✓			1	✓	7.5 x 18 x 7.5	0.6	1
✓	Relish Radio & Music Player AC-02	B	279	79	61	90	78	100	3			✓				2		18.5 x 24.5 x 11	1.2	1
✓	Sangean DPR-45	P	245	79	60	90	79	100	15			(C)			✓	1		17.5 x 29 x 11	1.8	1
✓	Pure Evoke Play Music System	P	499	76	70	90	81	40	10	✓		✓	✓	✓	✓	3	(A)	15.5 x 24.5 x 15	1.9	2
✓	Richter Core+ Digital Radio (RR26)	P	95	76	55	90	80	80	40						✓	1		11 x 18.5 x 6	0.3	1
✓	Tivoli Model One Digital (Gen 2)	B	449	76	78	90	65	60	6	✓	✓	✓	(C)	✓	✓	1		11.5 x 22.5 x 18	1.6	1
✓	Panasonic RF-D10GN	P	125	75	45	90	80	100	10						✓	1		14 x 25.5 x 8	1	1
✓	Sangean DPR-42BT	P	215	75	50	90	82	80	20			✓			✓	1	✓	13.5 x 22.5 x 5.5	0.7	1
✓	Sony XDR-S61DB	P	119	75	45	90	82	100	5				✓		✓	1		14 x 23 x 9.5	0.9	1
	Philips TAR5505/79	P	179	74	63	90	74	60	20			✓				1		14.5 x 20.5 x 10.5	0.9	1
	Tivoli Model One+	B	399	74	58	90	71	80	5		✓	✓	(C)	✓	✓	1		12 x 21.5 x 17	1.5	1
	Philips TAR5005/79	B	139	73	55	84	72	100	20						✓	1		16 x 10 x 11.5	0.5	1
	Pure Evoke Spot Compact DAB+ Radio	B	349	73	53	90	81	60	10	✓		✓	(C)		✓	1		19.5 x 12 x 13	1.1	2
	Sangean DDR-47BT	B	599	73	68	87	69	60	10		✓	✓	✓	✓	✓	2		11.5 x 33 x 24	3	1
	Tivoli PAL+ BT	B	339	73	63	90	71	60	5		✓	✓		✓	✓	1	✓	15.5 x 9.5 x 11	0.9	1
	August MB225	P	60	72	45	90	70	100	20				(B)		✓	1	✓	7.5 x 14 x 3.5	1.3	1
	Panasonic RF-D30BTGN-K	P	239	72	43	90	75	100	10			✓	(B)		✓	1	✓	16 x 26.5 x 8.5	1.1	1
	Pure Elan One Portable	P	99	72	38	87	82	100	20			✓	(B)		✓	1		11 x 17.5 x 8	0.4	2
	Yamaha TSX-B237	B	599	72	78	90	66	20	40		✓	✓	✓	✓	✓	5	2	11 x 37 x 25	4.2	2
	Majority Little Shelford	P	149	71	48	90	72	80	10			✓	(B)		✓	1		17.5 x 13.5 x 10	0.8	3
	Pure Elan Connect+	P	149	71	43	90	82	60	20	✓		✓	(B)		✓	2		11.5 x 24.5 x 8.5	0.7	2
	Pure Evoke H3	P	199	71	43	90	85	60	7			✓	(C)	✓	✓	1	(A)	19 x 12 x 11.5	1	3
	Ruark R1 MK3	B	399	71	72	63	75	80	10			✓	(B)	✓	✓	1		19 x 13 x 16	1.4	2
	Sangean DAB+BOX	B	249	71	70	63	85	60	5				✓			1	✓	23 x 30 x 18.5	3	1
	Sangean DPR-64	P	129	71	40	90	72	100	15				(B)		✓	1	✓	7.5 x 13 x 3.5	0.2	1
	Pure Evoke Home	B	799	70	70	66	83	40	10	✓	✓	✓	(C)	✓	✓	4		18.5 x 37 x 13	3.9	2

TABLE NOTES Recommended We recommend digital radios with a CHOICE Expert Rating of 75% and above. **Type P** Portable, **B** Benchtop. **Price** Suggested by manufacturers as of April 2023. **CHOICE Expert Rating** is made up of listening (40%), reception (30%), ease of use (25%) and standby energy (5%). **USB** Indicates models that can play music off a USB device. **(A)** Optional. **(B)** USB port used for charging the internal batteries or power only. **(C)** USB port used for firmware update only. All models can tune into FM radio broadcasts while only the Sangean DPR-45 has support for AM radio. Pure models Evoke Play, Spot, Elan + and Evoke Home, as well as the Tivoli Model One Digital (Gen 2), support internet radio and Wi-Fi. The SC-HC302GN-K was made in Malaysia; the rest of the models in the table were made in China. ■

Bring back the beat

Don't bin your buds or can your cans. **Peter Zaluzny** says headphone repair and maintenance can be easy

While electrical engineering is outside most people's DIY capabilities, there are some simple cleaning and repair jobs that can keep your headphones running for years to come. After all, it's pretty disappointing having to throw out a great pair of headphones because of minor damage or dead batteries.

Quick cleaning

Headphones, especially earbuds, are gross if you think about it. They get exposed to all our bodily gunk followed by the grit and grime floating around in public, and then we shove them into our ears again and again. Ignorance is bliss, but so is an occasional clean.

Earbuds are susceptible to earwax (go figure) which is a magnet for dust and dirt, even when they're stored in their

case. You probably don't want to push that stuff into your earhole, so remove wax build-up by gently scraping it out of your

earbuds with a needle, straightened paper clip or toothpick.

If this doesn't work, lightly push some Blu-tack against the hole and pull it up. The earwax should cling to it and lift right out. Again, don't be too rough as the Blu-tack can become stuck quite easily. If your earbuds have removable silicone fittings, take them off and give them a wipe with a damp cloth. You can also use

these tools to remove dirt and lint from the audio and charging ports.

Just be gentle because the connection points are fragile and can be damaged if you scrape anything hard against them. Give the charging or carry case a clean as well, especially if you own earbuds. Wax can create a layer between the connection pins, which stops them from charging.

Finally, grab some alcohol wipes and give the outside of your earbuds or headphones a wipe, including any cables if you're using wired connectivity. Just be careful cleaning the pads as the alcohol may degrade the lining. Then gently brush away anything that's accumulated inside the headphones.

Replacement parts don't tend to be available for long after headphones are released



Replacing damaged parts

Silicone tips in earbuds, and padding used by on-ear and over-ear headphones, often wear down or go missing. This can leave headphones unusable as there's no protection between your ear canal/head and the hard plastic and nothing to hold them in place.

Many manufacturers, as well as a few third-party brands, sell replacement parts which are much cheaper than a new pair of headphones.

Though you can occasionally find these in stores, most are online only and they don't tend to be available for long after the headphones are released.

You may have trouble finding what you're after if your model of headphones is more than a year old. So, we recommend buying extra pads for on-ear and over-ear headphones, or tips for earbuds, when you purchase them. That way, you can store them away and you won't have to worry about sparse supplies down the line. For over-ear and on-ear headphones, you can try using the material from an old pair of stockings to hold degraded pads in place if you can't find replacement parts.

Dealing with dying batteries

It can be very frustrating when headphones that once held a charge for half a day or more barely last an hour after a few years of use. Unfortunately, rechargeable batteries degrade over time and are typically the death knell for an otherwise perfectly good pair of earbuds or cans.

A decent hi-fi repair store should be able to replace the batteries, and even though this can be expensive, it's usually cheaper than a new pair of headphones. Alternatively, you

could repair them yourself as most headphones use coin cell or lithium-ion batteries that you can easily find online for a fraction of the cost.

Not all headphones are created equal, however. Some, such as the Sony WF-1000XM3 earbuds (now discontinued), allow relatively easy access to the battery compartment with panels that can be popped off or unscrewed. Others, including the

Apple AirPods range, glue the casing shut which takes a lot more effort to open.

If you have some DIY skills but don't quite know where to begin, hop online and visit [ifixit.com](https://www.ifixit.com). This community-run website has repair guides for a huge selection of headphones

that probably includes the model you own. You can review the steps and decide whether you're up to the task before having a go.

Just remember that headphones are filled with small, fragile parts

that are easy to damage if handled roughly. While DIY can save money, you also risk damaging or destroying your headphones if you don't take care. Ribbon cables are particularly susceptible to tearing and it's also easy to insert coin cell batteries upside down which may cause them to overheat and fail very quickly. Bear in mind, most DIY repairs could void your warranty. Don't start cracking things open if the headphones are still covered by the manufacturer.

Updating the software

Most Bluetooth headphones have an accompanying app for smartphones and tablets. This is often used to deliver firmware updates that can add new features and security updates, fix existing problems and improve power consumption.

Some require the app during set-up while others don't need it at all. However, it's worth keeping it installed and checking every now and then to see if any firmware updates have become available. They may extend your headphones' lifespan. ▶



Shop Ethical rating

BRAND	RATING	NOTES: Other brands in our review not mentioned here don't have a Shop Ethical rating. For more on Shop Ethical ratings and what they mean, see p73.
Adidas	C	
Apple	C	
Beats by Dre	C	
Google	C	
Huawei	F	
JBL	F	
Samsung	F	
Sennheiser	B	
Sony	F	





85% Apple AirPods Gen 3

Type: In ear

The Gen 3 version of Apple's AirPods range stands head and shoulders above the other models in our test, in almost every respect. They're the only basic headphones to earn a very good CHOICE Expert Rating and they have near perfect sound quality results. They're only really lacking in the comfort and durability department where they score OK, but this isn't uncommon for earbuds, regardless of the brand. There are extra features available for iPhone/iPad users as well, including quick connect, custom touch controls and built-in support for the Siri digital assistant. That doesn't mean Android owners are out in the cold as the Gen 3 AirPods can still connect to most devices via Bluetooth, but added features will be limited and may not work at all.

BASIC HEADPHONES				PERFORMANCE				SPECIFICATIONS									
Recommended		Type	Price (\$)	CHOICE Expert Rating (%)	Sound quality score (%)	Comfort and durability score (%)	Audio enhancement score (%)	Bluetooth	True wireless	Foldable/portable	Travel case	Controls on headphones or cable	Can take calls	Supports mobile assistant*	Battery-powered	Cable length (cm) **	Weight (g)
✓	Apple AirPods Gen 3	In ear	279	85	98	66	78	✓	✓	✓	✓	✓	✓	✓	✓	na	9
✓	Apple AirPods Gen 2	In ear	219	78	87	74	46	✓	✓	✓	✓	✓	✓	✓	✓	na	8
✓	Sennheiser RS175	Over ear	499	78	92	66	40					✓			✓	na	330
✓	Sennheiser HD 560S	Over ear	320	75	92	67	5									301	282
✓	Sennheiser HD 599	Over ear	399	72	84	74	0							nt		303	295
	Sennheiser HD 300	Over ear	109	69	74	54	95			✓						136	177
	Sennheiser HD 569	Over ear	299	68	68	65	75					✓	✓	nt		304	330
	Beats by Dre Solo3 Wireless	On ear	299	66	65	68	60	✓		✓	✓	✓	✓	nt	✓	132	211
	Sony WF-C500	In ear	129	65	59	67	87	✓	✓	✓	✓	✓	✓	✓	✓	na	10
	Skullcandy Sesh	In ear	99	64	63	62	78	✓	✓	✓	✓	✓	✓	✓	✓	na	10
	Sennheiser CX 400BT	In ear	299	63	64	55	87	✓	✓	✓	✓	✓	✓		✓	na	12
	Audio-Technica ATH-M50xBT2	Over ear	349	62	56	72	64	✓		✓	✓	✓	✓	✓	✓	120	308
	Bose Sport Earbuds	In ear	300	62	64	54	78	✓	✓	✓	✓	✓	✓		✓	na	13
	Audio-Technica ATH-SQ1TW	In ear	129	60	50	67	87	✓	✓	✓	✓	✓	✓		✓	na	11
	Sennheiser CX True Wireless	In ear	199	60	59	53	87	✓	✓	✓	✓	✓	✓	✓	✓	na	13
	Grado SR60x	On ear	159	59	68	60	5									170	221
	Google Pixel Buds A-Series	In ear	159	58	48	69	78	✓	✓	✓	✓	✓	✓	✓	✓	na	10
	Sennheiser CX 350BT	In ear	149	58	59	47	87	✓		✓		✓	✓	✓	✓	57	15
	Huawei FreeBuds SE	In ear	99	57	62	49	59	✓	✓	✓	✓	✓	✓	✓	✓	na	10
	Sennheiser Sport True Wireless	In ear	199	57	57	49	87	✓	✓	✓	✓	✓	✓	✓	✓	na	13
	Apple EarPods with Lightning Connector	In ear	29	56	47	65	69			✓		✓	✓	nt		120	13
	Apple EarPods with Remote and Mic	In ear	29	56	53	63	50			✓		✓	✓	✓		112	12
	Audio-Technica ATH-DSR7BT	Over ear	599	55	48	58	78	✓			✓			nt	✓	nt	302
	Adidas RPT-02 SOL	On ear	401	54	50	56	68	✓				✓	✓	✓	✓	na	257
	JBL Endurance Sprint	In ear	99	54	56	42	87	✓		✓		✓	✓		✓	32	27
	JLab Audio Go Air Pop	In ear	49	54	43	63	87	✓	✓	✓	✓	✓	✓	✓	✓	na	8

TABLE NOTES Recommended We recommend products with a CHOICE Expert Rating of 70% or above. **Price** Recommended retail or typical retail price as of March 2023. **CHOICE Expert Rating** is made up of sound quality (55%), comfort and durability (35%) and audio enhancements (10%) which includes wireless interference, functionality loss in powered headphones, acoustic leakage and passive noise cancelling. * Built-in support for mobile assistants (Siri, Google, Alexa etc.). This can increase response time as the headphones can process your voice commands instead of sending them to your smartphone for processing. ** Some wireless headphones include an audio input and cable giving users the option to switch between wired and wireless. **na** Not applicable. **nt** Not tested.



83%
Sony WH-1000XM4

Type: Over ear

All models in the table below have Bluetooth and controls on the headphones or cable, and come with a carry case.

With noise cancellation on or off, these are some of the best sounding headphones in our test. Each can has touch controls that can be used to play, pause, answer calls, skip songs, and activate the built-in digital assistant. You can pick between Google Assistant or Alexa but there's no direct support for Siri. A cable input gives you options to improve sound quality and extend battery life, though battery life may not be an issue at 31 hours and with fast charge via the USB-C input. The one drawback is poor durability, so store them in the carry case and don't treat them roughly. Likely to leave shelves soon as Sony has released a newer model.

NOISE-CANCELLING HEADPHONES				PERFORMANCE							SPECIFICATIONS							
Recommended		Type	Price (\$)	CHOICE Expert Rating (%)	Sound quality score (%)	Listening score – noise cancelling on (%)	Listening score – noise cancelling off (%)	Comfort score (%)	Durability score (%)	Battery life (hours – measured)	True wireless	Detachable cable	Airplane adapter	Can take calls	Supports mobile assistant*	Foldable/portable	Cable length (cm) **	Weight (g)
✓	Sony WH-1000XM4	Over ear	439	83	81	100	95	69	38	31		✓	✓	✓	✓	✓	120	251
✓	Soundcore by Anker Space A40	In ear	130	80	76	100	84	62	50	8	✓			✓	✓	✓	na	10
✓	Bose QuietComfort Earbuds	In ear	400	79	67	100	95	61	50	7	✓			✓		✓	na	19
✓	Apple AirPods Max	Over ear	899	78	71	100	73	53	75	22				✓	✓	✓	na	385
✓	Sony WH-1000XM5	Over ear	549	76	89	63	95	63	69	32		✓		✓	✓	✓	119	249
✓	Bose Noise Cancelling Headphones 700	Over ear	599	74	67	88	95	62	38	23				✓	✓	✓	na	262
✓	Huawei Freebuds Pro 2	In ear	217	73	64	88	73	59	75	4	✓			✓		✓	na	12
✓	Sennheiser PXC 550-II	On ear	424	73	70	75	95	60	63	28			✓	✓	✓	✓	na	231
✓	Bang & Olufsen Beoplay EQ	In ear	650	71	73	75	95	59	38	6	✓			✓		✓	na	16
✓	Razer Opus	Over ear	330	71	53	75	95	62	88	34		✓	✓	✓	✓	✓	130	269
✓	Sennheiser Momentum 4 Wireless	Over ear	550	71	68	75	84	61	63	63		✓	✓	✓	✓		120	292
✓	Marshall Monitor II ANC	Over ear	499	70	72	75	95	63	25	27		✓		✓	✓	✓	ns	316
	Bang & Olufsen Beoplay EX	In ear	650	69	79	63	89	59	38	5	✓			✓	✓	✓	na	13
	Beats by Dre Studio 3 Wireless	Over ear	450	69	54	75	73	64	100	62		✓		✓	✓	✓	120	260
	Sony WF-1000XM4	In ear	349	69	50	88	95	57	50	9	✓			✓	✓	✓	na	14
	Bang & Olufsen Beoplay H8i	On ear	670	68	30	88	95	53	100	43		✓	✓		✓	✓	120	222
	Bowers & Wilkins PX7 S2	Over ear	599	68	59	75	84	65	56	45		✓		✓	✓	✓	120	307
	JBL Live Pro 2 TWS	In ear	200	68	70	88	50	57	50	7	✓			✓	✓	✓	na	10
	Samsung Galaxy Buds 2	In ear	219	67	71	75	61	63	50	4	✓			✓	✓	✓	na	10
	JBL Live Pro+	In ear	169	66	53	75	95	49	63	6	✓			✓	✓	✓	na	10
	Google Pixel Buds Pro	In ear	299	65	46	88	61	56	75	6	✓			✓	✓	✓	na	12
	Marley Redemption ANC 2	In ear	249	65	65	75	61	59	50	6	✓			✓	✓	✓	na	11
	Bose QuietComfort 45	On ear	495	64	47	75	84	61	56	24		✓		✓	✓	✓	100	237
	JBL Reflect Flow Pro	In ear	299	64	48	75	95	42	63	8	✓			✓	✓	✓	na	15
	Soundcore by Anker Space Q45	Over ear	220	64	59	63	84	57	63	46		✓		✓	✓	✓	120	295

TABLE NOTES Price Recommended retail or typical retail price as of March 2023. **Recommended** We recommend products with a CHOICE Expert Rating of 70% or above. **CHOICE Expert Rating** is made up of overall sound quality (30%), listening with noise-cancelling on (30%), listening with noise-cancelling off (15%), comfort (15%) and durability (10%) scores. **Sound quality** is an assessment by a listening panel of the audio quality of the headphones when reproducing music, regardless of the noise-cancelling or isolation effectiveness. **Listening with noise-cancelling on/off** are assessments of active and passive noise cancelling/isolation capabilities and a second assessment of the sound quality when noise cancelling is turned off. * Built-in support for mobile assistants (Siri, Google, Alexa etc.). This can increase response time as the headphones can process your voice commands, instead of sending them to your smartphone for processing. ** Some wireless headphones include an audio input and cable giving users the option to switch between wired and wireless. **na** Not applicable. **ns** Not stated. ■



Spraying power

A pressure washer is not something you're likely to use every day. **Kim Gilmour** helps you find a model that will last

France's repairability index makes it possible for consumers to know how easily a faulty product can be fixed on a 0–10 rating scale. The scale was introduced in January 2021 and initially only covered a few key categories, such as smartphones, TVs and lawnmowers. But in November 2022 it was expanded to include pressure cleaners (also known as pressure washers). The initiative forms part of France's anti-waste laws,

which aim to encourage consumers to combat obsolescence by repairing products rather than replacing them. In time, the repairability index will evolve into a sustainability index and will include criteria around a product's reliability and robustness.

Many manufacturers have warranties that go up to seven years

While there isn't yet a similar scheme operating in Australia, the Productivity Commission inquiry report 'Right to Repair' in 2021 has recommended the government introduce one. In the meantime, a good rule of thumb when

NEED TO KNOW

- Pressure cleaners are generally serviceable, with many spare parts available.
- More battery-operated pressure washers are on the market but they still aren't as powerful as mains-powered pressure cleaners.
- Our two recommended models are among the most expensive, but there are cheaper models that also perform well.

choosing a pressure washer is to check which original spare parts are available, and whether manufacturers have listed service agents on their website. The online manuals, too, can give an indication of spare parts and what to do when troubleshooting.

Although you have rights under Australian Consumer Law, many manufacturers also offer warranties that go up to seven years when you register your product, which can give you extra peace of mind.

Bonjour to better appliances

In France, manufacturers are responsible for rating repairability. Factors they take into account that improve a pressure washer's score include:

- making manuals and other technical documents freely available for a number of years
- minimising the steps required to disassemble spare parts of the pressure cleaner such as the gun, high pressure hose and motor capacitor. Models score higher in this section if they have removable (and preferably reusable) fasteners
- making functional spare parts such as filters and handle frames available for longer periods
- ensuring any spare parts are cost-effective when compared to the cost of the pressure washer itself
- adequate free remote assistance (such as a help line or online troubleshooting tips).



Choosing the right tool

Always ensure you have the right nozzle for the job to avoid damaging surfaces. Most pressure washers let you swap a nozzle depending on the requirements of the job.



Rotary/turbo nozzle: For heavily soiled areas like footpaths and driveways.



Fan: A wide spray of water for large and lightly soiled areas, such as windows.



Pencil: A tight beam of water for stubborn spots, but be aware of potential damage to surfaces.



X-in-1: Combines various spray settings into a single head unit, so you can switch between different modes.



Rotary/patio brush: A gentle but effective clean for paths and patios. Most models we reviewed don't come with one, but it may be an optional extra. ▶

86%

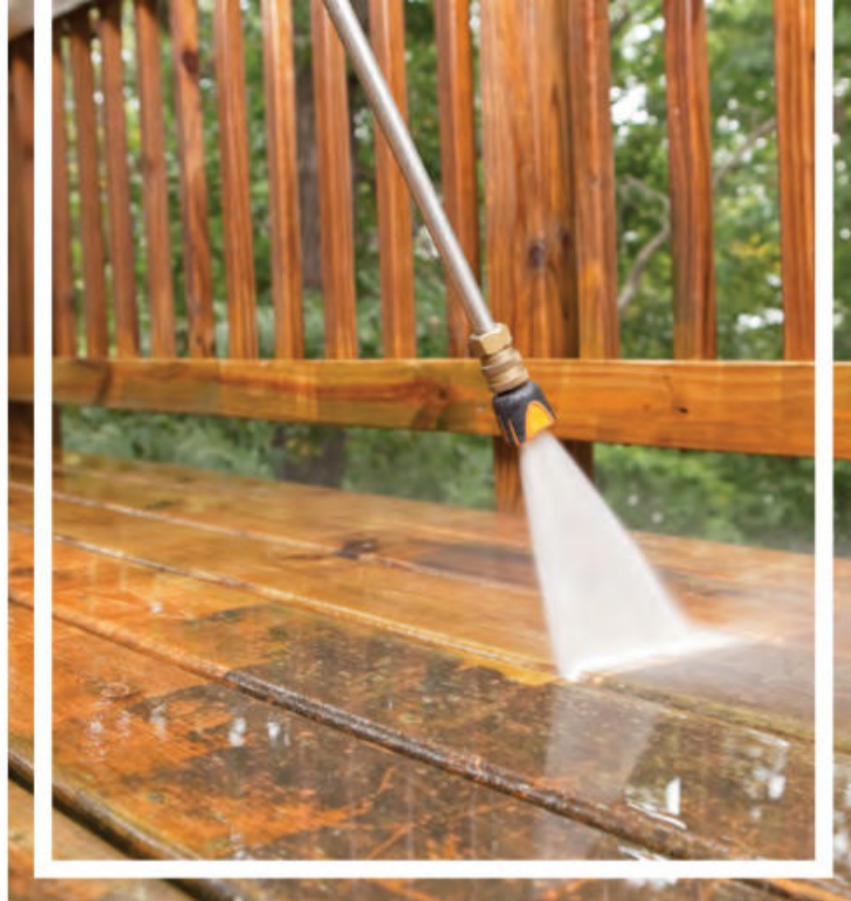
**Masport AVA Series Master P60
X-Large Bundle 10-100-702**



\$789

A full-featured, large pressure cleaner with an excellent score for cleaning performance in our 2021 test. While it's on the heavier side at 23.2kg, it has good wheels and a high handle which make it easy to move around.

Accessories include a patio brush and six different nozzle options (15°, 20°/60°, vario, rotary action and detergent for general low-pressure cleaning). Bear in mind it uses a relatively high 8.3L of water per minute. For service and support, authorised dealers are listed on the website and a number of accessories are available such as a "first aid kit" which includes o-rings.



84%

Gerni 7300



\$739

There's nothing negative to say about this model with its very good cleaning performance and ease of use scores in our 2021 test. It comes with an auto nozzle designed for painted surfaces, variable spray nozzle, jet spray nozzle, detergent nozzle and patio brush.

For ease of moving around, the gun/nozzle can be orientated via 360° rotation. Though we haven't rated the model's repairability, you can find authorised service agents, a list of available spare parts and an expanded diagram of the machine on the Gerni website.

Battery-operated models

Our testers are seeing more battery-operated pressure washers, from brands like Bosch, Makita, Ryobi and Worx. Batteries are often interchangeable with other garden and home tools from the same family – and they're recyclable.



You're also not limited by needing to be near a power source. But in general the performance of the battery machines is nowhere near what you get with a mains-powered one. They're best suited for light jobs, not for removing years of built-up grime. Most are poor performers, so there's a lot of room for improvement. The highest performing battery model from our 2023 test is the **Makita 18Vx2 Brushless High Pressure Cleaner Kit DHW080PT2** (\$1119), but it only scores 40% for cleaning performance. However, ease of use is good, and it comes with a large, wheeled container that can be used as both a water tank (so you won't need to be near a tap) and also a container to store the cleaner and all its accessories. It uses 5.5L of water per minute.

TABLE NOTES Recommended We recommend products with a CHOICE Expert Rating of 80% and above. **Price** Recommended or typical retail price as of February 2023. **CHOICE Expert Rating** Made up of cleaning performance (60%) and ease of use (40%). Note that performance results from one year can't be directly compared to another year's results. Testing in real-life scenarios means there are variations in grime build-up on our test surfaces from year to year. **Noise** is measured at the user's position, approximately one metre from the unit. The noise produced by each nozzle is measured and we publish the highest noise level here. * The distance from power point to nozzle tip at full stretch. ** Total warranty period including additional time following product registration. **(A)** Two are included. **(B)** Built in. **(C)** Only on tank/container. **na** Not applicable. **ns** Not stated. ■

Recommended				PERFORMANCE				SPECIFICATIONS								
	Price (\$)	Year tested	CHOICE Expert Rating (%)	Cleaning performance score (%)	Ease of use score (%)	Noise (dBA)	Detergent bottle	Rotary brush	Wheels	Claimed water consumption (L/min)	Claimed water delivery (L/hr)	Reach from power point (m)*	Weight (kg)	Warranty (yr)**	Country of origin	
MAINS-POWERED																
✓	Masport AVA Series Master P60 X-Large Bundle 10-100-702	789	2021	86	90	80	79	✓	✓	✓	8.3	498	13.6	23.2	7	China
✓	Gerni 7300	739	2021	84	85	82	80	✓	✓ (A)	✓	6.8	408	17.8	20.2	7	China
	Ozito 1800W 2030PSI High Pressure Washer	119	2021	79	85	69	80			✓	6.0	360	10.6	6.1	3	China
	Stihl RE 90	239	2019	79	80	77	79	✓		✓	5.8	348	12.3	9.6	2	China
	Karcher K5 Premium Full Control Home	799	2021	77	70	87	78	✓	✓	✓	6.8	408	15.8	14.3	7	Italy
	Stihl RE 130 Plus	669	2019	77	75	79	81	✓		✓	7.0	420	14.9	21.6	2	China
	Gerni 3600	219	2021	76	75	77	80	✓	✓ (A)	✓	5.4	324	11.5	6.4	5	China
	Stihl High Pressure Washer RE 125 X Gen 2	499	2023	76	80	71	82	✓			7.1	426	14.1	17.0	2	China
	Gerni 5300	499	2021	75	70	82	82	✓	✓ (A)	✓	7.5	450	14.8	18.1	7	China
	Karcher K3 Premium Full Control, Car, Home & Deck Kit	489	2021	75	65	91	78	✓ (A)	✓	✓	5.5	330	14.0	6.6	5	China
	Bosch AdvancedAquatak 150 0600886102	629	2023	72	70	74	86	✓		✓	7.5	450	13.8	21.1	3	China
	Bosch UniversalAquatak 125	215	2018	72	70	74	83	✓		✓	5.3	318	10.7	7.0	2	China
	SCA Electric Pressure Washer 1450PSI - THW140Y	100	2018	71	70	72	78			✓	5.5	330	8.8	5.1	1	China
	Bosch AdvancedAquatak 140	510	2021	69	65	75	86	✓		✓	6.8	408	13.2	18.1	3	China
	Husqvarna PW 125 967676403	239	2023	69	60	83	80	✓		✓	5.4	324	12.9	6.9	2	China
	Karcher K4 Premium Power Control 1.603-421.0	549	2023	68	60	79	84			✓	6.7	402	15.0	15.0	5	China
	Makita High Pressure Washer HW1300	469	2019	68	65	72	76	✓		✓	5.0	300	16.4	14.0	2	China
	Bosch EasyAquatak 120	155	2018	67	65	71	83	✓			5.4	324	10.8	5.2	2	China
	Hikoki High Pressure Washer AW 150 C217869A	379	2023	66	60	76	81	✓		✓	6.7	400	15.8	12.4	6	China
	Karcher K2 Power Control Home 1.692-356.0	259	2023	65	55	81	83			✓	5.5	330	11.8	5.2	5	China
	Saber 2300PSI 2400W Pressure Washer	389	2021	64	60	69	78	✓		✓	7.0	420	15.5	21.9	1	China
	Ryobi 2100W Pressure Washer RACPWS4	499	2023	63	55	75	81	✓ (B)		✓	5.7	342	21.9	20.5	4	Vietnam
	Typhoon 2.0kW 3000PSI EWP High Pressure Washer Cleaner	299	2021	63	55	75	80	✓		✓	6.5	390	14.8	11.8	1	ns
	Hikoki AW130(H1Z)	289	2021	62	55	73	81	✓		✓	6.0	360	15.6	8.3	6	China
	Makita High Pressure Washer HW1200	369	2019	62	55	73	76	✓		✓	5.5	330	16.6	12.4	2	China
	Masport AVA Series GO P40 Large Bundle 10-100-716	339	2021	61	50	78	83	✓			6.5	390	11.6	7.0	7	China
	Bosch UniversalAquatak 130	285	2019	60	50	74	82	✓		✓	6.0	360	11.8	8.2	2	China
	Yard Force EW U11-Au	109	2021	58	50	71	80				5.3	318	9.7	5.5	1	China
	Bosch EasyAquatak 100	115	2019	46	35	62	80	✓			4.8	288	8.4	4.0	2	China
BATTERY-POWERED																
	Worx Hydroshot WG620E	239	2021	58	45	78	70	✓			2.0	120	na	1.1	3	China
	Makita 18Vx2 Brushless High Pressure Cleaner Kit DHW080PT2	1119	2023	53	40	72	74			✓ (C)	5.5	330	na	13.0	5	China
	Ryobi 18V 600PSI Power Washer R18XPWS10	408	2023	52	35	77	85				2.7	159	na	3.5	6	Vietnam
	Worx HydroShot Plus Kit WG630E.B	359	2023	51	30	82	88				3.5	210	na	3.2	3	China
	Bosch Fontus 18V 06008B6102	498	2023	36	20	59	74			✓	1.8	108	na	7.7	3	China

IMAGE: GETTY

INDEX

USING THE INDEX All articles are from the past 12 months.

* Indicates a correction or clarification (see Checkout).

HOME & LIVING

Air conditioners	Jul, Nov
portable	Feb
Air fryers	Nov
Air purifiers	Apr
Bathroom cleaners	Dec/Jan
Bathroom, reducing plastic	Aug
Carpet shampooers	Mar
Ceiling fans	Nov
Cleaning products	Dec/Jan
Clothes dryers	Sep
Cooktops	
ceramic	Oct
induction	Apr
Money-saving tips	Jun
Dishwasher detergent	Oct
Dishwashers	Jun, Dec/Jan
Dishwashing liquids	Jul, Apr
Doonas	Jul
Dryers	Sep
Eco-friendly laundry	Aug
Electric heaters	Jun
Espresso machines	Aug, Apr
Food processors	Aug
Fridges	Aug, Mar
Frypans	Oct
Hibachi grill	Oct
Home heating tips	Jul
Humidifiers	Jul
Kitchens, keeping cool	Dec/Jan
Laundry detergents	Sep
Mattress toppers	Jul
Mattresses	Jul, Feb
care tips	Jul
Microwaves	Aug, Mar
convection	Mar
hacks	Oct
Mould and damp	Dec/Jan
Ovens	Oct
Paper towels	Oct
Pill boxes	Feb
Pillows	Jul
care tips	Jul
Rangehoods	Jul
Refrigerators – see fridges	
Rice cookers	Oct
Second-hand appliances	May
Splurge vs save appliances	Jun
Sustainable appliances	May

Steam mops	Dec/Jan
Toasters	Aug
Vacuum cleaners	Jun*, Sep
Dyson Gen5detect stick vac	
	Dec/Jan
stick vacs	Jun, Feb
robot vacs	Jun, May
Washing machines	
	Nov, Feb, Apr*, May

ELECTRONICS & TECHNOLOGY

Apple iPad 10th gen	Apr
Batteries	Jun
Tenavolts AA Rechargeable	Sep
Best digital products	Sep
Best NBN providers	Sep
Bluetooth trackers	Feb
Digital access for the elderly	Mar
Digital radios	May
Relish DAB+ digital radio	Jun
e-Readers	Aug, Mar
Headphones	Dec/Jan, May
Home office	Dec/Jan
Huawei FreeBuds Pro 2	Oct
Make your regular TV smart	May
MacBook Pro 14-inch	Aug
Onyx Boox Nova Air C e-Reader	
	Jul
Phones for seniors	May
Power banks	Mar
Printers	Jun
Repurposing old tech	May
Security cameras	Jun
Smartphones	Dec/Jan
Soundbars	Dec/Jan, Apr
Speakers, wireless	Dec/Jan
TCL Nxtpaper 10s	Mar
TVs	Oct
Upgrading your laptop	May
VPN guide	Apr

INSURANCE & MONEY

Bankruptcy advice	Mar
Buy now, pay later car loans	Jun
Credit cards & retirees	Nov
Cryptocurrency regulation	Jul
Financial health check	Dec/Jan
Health insurance discounts	Sep

Home insurance	Nov
extreme weather events	Oct
Money-saving tips	Jun
Superannuation	
death benefit nominations	
	Jul, Oct
how much you need to retire	
	Sep
scams	Apr

CONSUMERS & DATA

Anonymity online	Apr
Brosa collapse	May
Cashback sites	Sep
Dark patterns,	
deceptive web practices	Nov
Personal data	
breaches	Apr
on the dark web	Apr
Telco satisfaction survey	May

BABIES & KIDS

Button batteries	Mar
Thermometers	Jul

TRAVEL

Car rental	Feb
Flight cancellation rights	Feb
Lost or damaged passport	Apr
Luggage	Feb
Qantas travel credits	Jun
Travel insurance	Feb
Travel money cards	Feb

OUTDOOR

Lawnmowers	Feb
Outdoor kitchens	Dec/Jan
Pet scams	Aug
Pressure cleaners	May

HOME IMPROVEMENT

Reducing energy use	Aug
Smart doorbells	Apr
Smart locks	Apr
Smart meters	Mar
Solar battery trial	Nov
Solar panels & installation	
	Jun, Mar
Tap timers	Aug

FOOD & DRINK

Butter	Feb
Coffee pods	Nov
Cooking on a budget	Oct
Meal delivery kits	Nov
Nootropic drinks	Oct
Oats and porridge	May
Peanut butter	Oct
Supermarket house brand	
taste test round-up	Oct
Using your leftovers	May

HEALTH & BODY

First-aid kits	Sep
Sleep tips	Jul

SHOPPING

Carbon neutral businesses	Aug
Electronics stores,	
best and worst	Sep
Ethical shopping on a budget	
	Aug
Extended warranties	Dec/Jan
Grocery delivery services	
	Dec/Jan
Packaging materials review	
for recyclability	Apr
Plastic packaging recycling	Aug
Product reliability survey	Sep
Shonky Awards 2022	Nov
Shop Ethical ratings	Feb
Shrinking pack sizes	Jul
Supermarket tricks	Feb
Unit pricing	Jun
Utilities	
paying bills	Mar
switching providers	Mar

TRANSPORT

Dashboard cameras	Mar
Electric cars	Mar
Fuel apps	Aug
Fuel costs, how to save	Jun
Lemon car sales	
in remote communities	Nov
Roadside assistance	Jun



ISSUES BY THEME

- June 22** The cost of living issue
- July 22** The sleep issue
- August 22**
The conscious consumer issue
- September 22**
The product reliability issue
- October 22** The food issue
- November 22** The Shonkys issue
- December 22/January 23**
The summer issue
- February 23** The travel issue
- March 23** The energy issue
- April 23** The privacy issue
- May 23**
The repair and reuse issue

Shop Ethical ratings Shop Ethical rates the environmental and social impact of companies (not products) using independent sources. Where available, we publish Shop Ethical ratings in *CHOICE* magazine for the brands whose products we test. This rating is not included in our own scoring. If a brand doesn't appear in our Shop Ethical tables, it means there's no rating for that company. Shop Ethical regularly reviews its ratings, but those that appear in *CHOICE* are correct at the time we went to press. For more, visit ethical.org.au.

RATING	KEY
A	Praises, no criticism
B	Some praise, no criticism
C	Praises, some criticism
D	Criticism, some praise
F	Criticisms



CONTACT US

CHOICE, 57 Carrington Road, Marrickville, NSW, 2204
Email ausconsumer@choice.com.au
Customer Service 1800 069 552
 (Mon to Fri, 9am to 5pm AEST or AEDT)

WEBSITE ACCESS

To browse all our test reports and reviews, when and as often as you like, contact Customer Service to add website access to your membership package.

CHOICE HELP

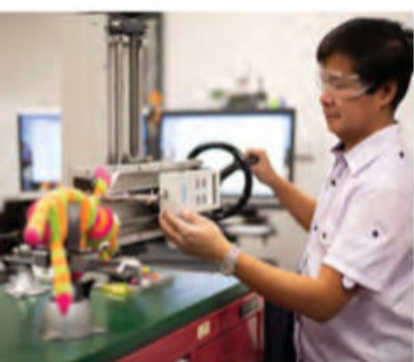
Do you have a problem with a product or a service? Find out what your rights are at choice.com.au/choicehelp. If you need more advice, email our Customer Service team.

CHOICE SHOPPER

CHOICE members get free access to our CHOICE Shopper service. Save with member-only deals on appliances and electronic goods. Call **1300 360 655** with the name and model number of the product you want to buy, the price you want to beat, and your membership number.

View the CHOICE Privacy Policy:
choice.com.au/privacy-policy.





CHOICE TEAM

Chief Executive Office Alan Kirkland (CEO), Alana O'Sullivan, Zara Hawthorne **Commercial & Finance** Tristan Ye (Director), Edward Mao, Daniel Sun, Kelly Yang, Phyo Zin **Campaigns & Communications** Jessica Kirby (Director), Rafi Alam, Erin Barton, Kate Bower, Shaina Cabusi, Katelyn Cameron, Jordan Cornelius, Antoinette Dyce, Daniel Herborn, Jim Hook, Andrew Kelly, Brendan Mays, Yelena Nam, Xavier O'Halloran, Julian Peters, Rebekah Sarkoezy, Bea Sherwood, Alexandra Söderlund, Cameron Stewart-Baker, Rosie Thomas, Patrick Veyret **Data & Technology** Ashwin Sridhar (Chief Data and Technology Officer), Waqas Bajwa, Matthew Barry, Aurelien Calixte, Graham Cox, Bohdan Dubik, Vincent Feng, Camilo Forero, Ian Fraser, James Green, Andrea James, Farrukh Khan, Audrey Lenain, Rong Liu, Hooran Mahmoudinasab, Simon Miller, Ehsan Razavi Nejad, Wahida Nusrat, Steven Peralta, Deepa Kartik Coimbatore Prakash, Samir Sadikhov, Corrine Shipway, Mitch Thompson, Peter Vien, Michelle Walker, Ben Watson, Darren Weir, Anthony Williams, Neelima Yazali **Editorial & Investigations** Margaret Rafferty (Editorial Director), Jane Bardell, Jarni Blakkarly, Tracy Ellis, Wendy Evans, Erin Farrugia, Rachel Hynes, Liam Kennedy, Andy Kollmorgen, Ren Matthews, Grace Smith, Emily Swanson, Danny Wynne **Growth & Experience** Ian Morgan (Director), Amanda Adams, Christopher Archer, Amanda Audze, Guy Bennett, Marina Bennett, Ivone Bozzi, Laura Bunning, Megan Chambers, Elaine Chang, Steve Connolly, Sarah Coombs, Chris Coward, Lesley Davenport, Siobahn Donohoe, Hansley Elegante, Pru Engel, Peter Giles, Christina Hofmann, Teresa Joynt, Isabel Lam, Tom Mauger, Clarissa Meffan, Mel Moran-Gonzalez, Gianna Nashar, Jo Naughton, Soraya O'Malley, Jen Paterson, Helen Raadts, Preksha Rathore, Alice Richard, Silvana Ristevska, Catriona Roden, Ariella Ryner, Piki Vaifale-Muliaga, Rachel van Zanten, Emily Williams, **People & Culture** Maria Mermelas (Director), Graham Byrne, Vanessa Cruz, James McCay, Kate Renton **Reviews & Testing** Matthew Steen (Director), Alex Angove-Plumb, John Ashes, Chris Barnes, Jodi Bird, Mark Blades, Antonio Bonacruz, Ben Bridges, Sharon Cauduro, Rebecca Ciaramidaro, Narelle Cornelius, Chantelle Dart, Shadia Djakovic, Steve Duncombe, Denis Gallagher, Kim Gilmour, Daniel Graham, David Hill, Ashley Iredale, Deanna Jones, Sean Lim, Adrian Lini, Fiona Mair, Carl Mihailovich, Uta Mihm, Mostafa Mohamed, Sam Nall, Klaus Neuscheler, Shafi Noor, Scott O'Keefe, Elias Plastiras, Martha Psiroukis, Gene Ross, Sonja Scodeller, Christine Shaday, Melanie Stopic, James Thomson, Matthew Tung, Petr Valouch, Art Woottiarporn, Peter Zaluzny.

Use of CHOICE materials policy **Be on notice** CHOICE owns the copyright for all material presented in its publications and on its Sites, and some of our employees and/or contractors own moral rights. If you'd like to use any CHOICE ratings, reports, articles, materials, photos, graphics, publications, products or equivalent materials including trade marks and other CHOICE intellectual property ("the Materials"), in whole or part, you must have our written permission before doing so. The Materials are protected in Australia and internationally by the law of copyright, moral rights, trade mark, equity, common law and other legislation such as the Competition and Consumer Act 2010. We reserve the right to take legal action to prevent any unauthorised use or reproduction of the Materials, in whole or part, for any purpose including but not limited to advertising, copyright works, trade marks, logos and any commercial purpose use. You can help us by asking for permission to use the Materials or reporting anything you think breaches this agreement to us at CHOICE Consumer Services, 57 Carrington Rd, Marrickville, NSW 2204. Phone (02) 9577 3399; fax (02) 9577 3355; email ausconsumer@choice.com.au. **Your privacy** We are committed to protecting your privacy and abide by the Australian Privacy Principles (as amended and revised). We never sell, publish or disseminate mailing lists to third parties. You can find our privacy statement at choice.com.au/privacy or contact us at the above address for a copy. **Intellectual property** CHOICE™ is a trademark of the Australian Consumers' Association Ltd. All information, artworks, photographs, compilations or equivalent works appearing in our magazines, on our website, in electronic media and/or online is the subject of copyright/trademark or otherwise protected under Australian and international law for our exclusive use. © Australian Consumers' Association Ltd 1960–2023 inclusive. All rights reserved. Only CHOICE Recommended licensees are permitted to use the CHOICE™ trademark, and use of the CHOICE™ trademark by licensed parties must be approved by CHOICE before publication. **The Board** The Australian Consumers' Association is governed by an honorary and independent board elected by financial and voting members. Board directors give their time without remuneration. Directors must be free from conflicts of interest and have clear lines of responsibility. **Board Co-Chairs** Anita Tang and Nic Cola **Directors** Samantha Challinor, Kat George, Fiona Guthrie, Fiona Jolly, Alexandra Kelly, Jamie Pride, Amanda Robbins **Company Secretary** Sarah Coombs.

The Australian Consumers' Association is a not-for-profit organisation limited by guarantee. ACN 000 281 925 ABN 72 000 281 925. Registered office: 57 Carrington Road, Marrickville, NSW 2204, Australia.

CHOICE editorial guidelines

Accuracy: Our journalists use sources from trusted institutions with a reputation for careful and unbiased research. Our verifiers check articles and reviews before publication, to make sure facts and quotes are accurate and data has been interpreted correctly.

Corrections: If we've made an error in CHOICE magazine, we include the correction in the next available issue

(usually in the Checkout section of the magazine). If you think we've got something wrong, please visit choice.com.au/contactus.

Reviews and testing: Our testers put products through their paces in our own NATA-accredited laboratories. We use test methods based on Australian standards and develop our own to match the way consumers

use a product in their homes. We buy most products we test, maintaining our independence from manufacturers and so we know what you're faced with in the shops. We've checked the models are available at the time we publish. Our recommendations are based on a product's quality and performance, with no hidden bias. See choice.com.au/editorialguidelines.

NEXT MONTH

EOFY

Make the most of the sales and your tax deductions



Funding your future

Why tax time is a good time to top up your super



EOFY sales

Home office tech worth lining up for



Cool customer

How to shop mindfully in the sales

Plus TVs, dryers, turntables, ovens, stick vacs & more

HARD WORD

Our long-serving rogues' gallery of dodgy ads, toe-curling typos and misadventures in marketing, as sent in by you – our tickled, angered and bewildered readers. And thanks to the timeless shonkiness of so much advertising, you're always spoilt for choice – so keep 'em coming. Email high-quality unedited photos to hardword@choice.com.au.

This month, thanks go to Mike Aylott (More than meats the eye), Susan Dadswell (Sweet but scary), Kim Gilmour (Dizzy spell) and Troy Kalleske (Stacks on).

Compiled by Daniel Wynne



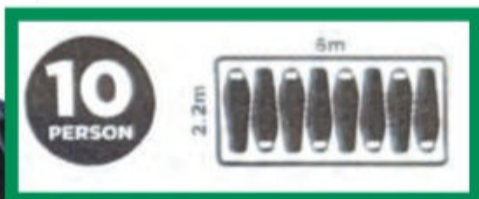
SERVING SUGGESTION

SWEET BUT SCARY!

We strongly recommend you **DON'T** try this serving suggestion.

oztrail FAST FRAME BLOCKOUT 10P

- With 3 large bedrooms sized to fit queen and double stretchers and airbeds, this tent provides more than enough space to sleep the family in comfort.
- Removable divider allows for individual bedrooms or one large living area.



STACKS ON

Are two campers meant to sleep on other campers? The roof?




SMH

Are your kids missing an important **heath** check?

Sponsored by Specsavers

DIZZY SPELL

Yes, we really should book an appoint... hang on a second!

MORE THAN MEATS THE EYE

Vegetarians may have a "beef" if given this for dinner.



\$10 kg

SAVE \$2kg WAS \$12kg

AUSTRALIAN MADE

Coles Australian No Added Beef Corned Silverside