(Approx. 739 words)

Experts: DON'T Charge Your Smartphone or Tablet Overnight – Your Battery Will Thank You

Kurt Jefferson, Editor, Central Kentucky Computer Society

<https://ckcs.org/>

lextown2 (at) gmail.com

Many of us who own iPhones, iPads, Android phones, or similar devices charge them while we sleep. So, as we're napping, our phones and tablets slowly charge their batteries. Then, when we awake, we're ready to take on the day, and so are the devices on which we depend–ready with a 100% charge.

Now, experts are spreading a new message: By charging our devices overnight, we might slowly be killing the battery. Techjury.net writes, "I know it's great to wake up and have 100% juice to carry you through the day. However, your cell phone battery needs only about two hours to recharge itself completely."

Techjury adds, "Experts' opinions on Li-Ion batteries are unanimous – you should keep your iPhone charged at 40%-80%. This is the optimal charge level of your iPhone (or any other smartphone, for that matter) to prolong its battery life. Sometimes this 20% could mean the difference between your iPhone lasting through the day or not. Still, charging your iPhone overnight to 100% often will decrease its battery capacity faster."

If you need more proof, ladbible writes, "Before going to sleep, most of us will put our phone on charge to make sure it's ready for the day ahead. But doing this could be causing damage to our iPhones, according to tech expert Adrian Kingsley-Hughes, writing for ZDNet."

"An iPhone can go from zero to 50% charge in about 30 minutes using a 20W charger, and then go to being fully charged in under two hours," writes Kingsley-Hughes.

He adds, "Given that an iPhone can charge up so rapidly, it doesn't make sense that we hook it up to a charger for eight hours a day.

That works out to a third of its lifetime."

Plenty of iPhone owners are unaware of this, but Apple introduced Optimized Battery Charging in iOS 13 for iPhone. So, if you're running that version of iOS or later, your device stops charging when it's 80% charged.

Optimized Battery Charging is switched on by default. (It's available only on the iPhone–not the iPad.)

If, for some reason, you want to turn off Optimized Battery Charging, visit Settings > Battery > Battery Health > Optimized Battery Charging.



Apple writes, "When the feature is enabled, your iPhone will delay charging past 80% in certain situations. Your iPhone uses on-device machine learning to learn your daily charging routine so that Optimized Battery Charging activates only when your iPhone predicts it will be connected to a charger for an extended period of time. The algorithm aims to ensure that your iPhone is still fully charged when unplugged."

Returning to the original question–why shouldn't you charge your device overnight?

The simple one-word answer is–heat.

Here's how Kingsley–Hughes explains it: "Heat is a killer of batteries. While there's nothing you can do about the normal wear and tear that a battery experiences from being charged and discharged, heat is something you can do something about. When your iPhone is connected to a charger, it gets warmer -- warmer than if it isn't connected, and even though that increase might only be a few degrees above room temperature, doing this overnight every night doesn't seem smart to me."

He writes that he has radically changed how he charges his iPhone.

Instead of charging it overnight as he sleeps, he now gives it one or two daily charges.

Under his new schedule, he charges his iPhone for 30 to 45 minutes directly after he awakes. (During this same period, he charges his Apple Watch.)

Then during mid-afternoon, he charges his phone for another 30 minutes so that the battery icon shows it's 80% charged. Kingsley-Hughes says that's usually enough of a charge to last until the next morning.

If he knows he'll be on a trip that keeps him inside his car, he takes a car charger or a power bank and recharges his phone using either of those measures.

In summary, he believes the new charging regimen stresses his iPhone's battery and charger less. And he uses a cable rather than a wireless charging system.

So, there you have it.

If you're still charging your iPhone, iPad, or Android device while you sleep overnight—stop it. Instead, find an alternative charging schedule.

Experts say your battery will live longer.