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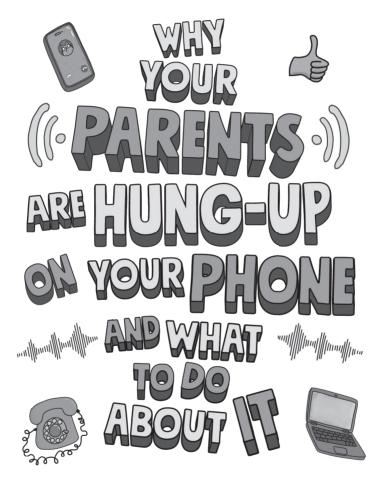
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DEAN BURNETT

Illustrated by Katie Abey





PENGUIN BOOKS



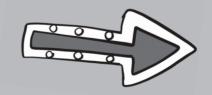
Dedicated to my own children,
Millen and Kavita.

This is what Dad was doing when he was sat in his writing shed all that time.

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SOME BASICS **ABOUT** THIS BOOK



HELLO!

To begin, I'd like to say thanks for buying this book.

Unless . . . you *didn't* buy it. Maybe it was bought for you as a gift from a relative or friend. Or maybe you got it from a library or your school . . . If so, please pass on my thanks to whoever supplied you with this book.

Unless . . . you didn't *want* this book and it's been imposed on you by whoever *did* buy it. I'm not thanking someone who goes around forcing people to read things they don't want to read! Who even *does* that?

You know what? I've confused myself now. So let me start again.

Hello! And thanks for choosing to read this book. I hope you enjoy it.

There, that's better.

SO, WHO AM I, EXACTLY?

I'm Dean.

Dean Burnett, to be precise.

Doctor Dean Burnett, to be even more precise.

For the record, I'm not a *medical* doctor. Don't come to me for help with broken bones, ruptured organs or anything like that. At best, I'll do nothing. At worst, I'll *try* to help, which will end up with you feeling much worse.

No, I'm the other kind of doctor. I'm a scientist. A *neuro*scientist, specifically. I study and know about the brain and nervous system. How they work, what they do, all that stuff. And when you realize that the brain and nervous system are responsible for *everything any human has ever done or experienced*, you come to realize that 'all that stuff' is quite a lot.

However, I've never been into running brain experiments or working in the lab. Instead, I love *talking* about the brain, and eventually this became my actual job. First as a teacher and lecturer about all things mental health

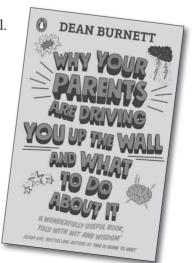
and beyond, then as a writer – of articles, columns and, eventually, books.

One of my books was for older children and teens. It was about the differences between their brains and their adult parents' brains, and how these differences explain the constant arguments between parents and older children. I also explained why these arguments aren't automatically the younger person's fault, despite what many adults say.

That book was called *Why Your Parents Are Driving You Up The Wall And What To Do About It.* It was pretty popular. So much so, my publishers said, 'If you ever want to do a sequel, just let us know.'

And I did want to do a sequel.

This is it.



WHAT'S THIS BOOK ABOUT?

Well, it's about . . . the same thing as the previous book. Sort of. But with an important difference. This book focuses on a common cause of arguments between parents and teens.

Basically, this book is about phones.



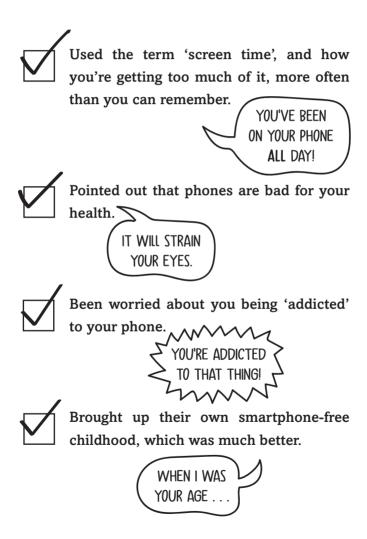
1. Because smartphones are the type of phone everyone has now and they do all the stuff parents worry about. And it'd be weird to write a book about older phones that people your age hardly ever use any more. I might as well write a book called *Why Your Parents Are Grumpy About Your Gramophone*.

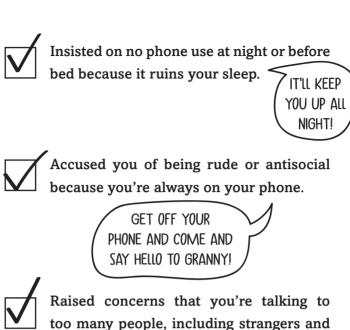
I'll bet any amount of money that you and your parents have had many disagreements about your phone. Perhaps because you *don't* have a phone but feel you need one, except your parents don't agree. Or perhaps you *do* have a phone, but your parents object to how much you use it. Or what you use it for.



Either way, the result is: arguments. Between you and your parents. About phones.

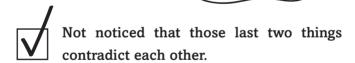
You might have noticed that parents (and other adults) have a whole range of 'concerns', which they talk about during arguments about phones. How many of these have your own parents done?





suspicious types, via your phone.

CAREFUL WHO
YOU'RE TALKING TO.



Parents everywhere say these things *all the time!* So it would be surprising if they were all wrong.

The thing is . . . they are. Wrong, that is. Mostly.

Nine times out of ten, all these claims about the dangers of phones are *not* based on genuine brain science. Usually, it's the opposite! It's basically an avalanche of wrong information being vomited out into the world and constantly repeated by adults, who really should know better

So that's what this book is about.

The actual facts

about how phones and devices affect you (and everyone else, young or old).

It's also about how you can *use* this information – to separate the things your phones can do to you that your parents are *right* to be worried about, from the worries they have that are more to do with their own paranoia.

Hopefully, by doing this, rather than having yet another argument, you can start a genuinely helpful discussion and reach an agreement with your parents around the subject of phones and technology, and end up with a

better understanding of phones and a less stressful life for everyone.

It's worth a shot, right?

WHO ARE YOU?

The sort of reader this book is aimed at is a typical older child or teenager, between 11 and 16 years of age. If that's you, hi! I hope you enjoy what's ahead.

Of course, if you're younger than that, I'm still happy for you to read this book. (Not sure how I'd stop you if I wasn't happy, to be honest.)

Similarly, if you're a parent or other actual adult, you're also welcome to read this. But you might get rather annoyed by what I'll be saying about you. If you are, don't say you weren't warned.

Anyway, I'm going to assume you, the reader, are an 11- to 16-year-old. One who regularly argues with their parents about phones.

Now, here's the thing. There's been so much written about what young people should and shouldn't do with their phones, but most of it ignores one crucial aspect: *actual young people* and what *they* think. Most of the stuff out there about 'the dangers' of phones is basically adults telling other adults what they should be telling their children to do/not do with their phones. What their children think about this is, apparently, unimportant.

Adults who like to moan about phones and 'kids today' seem to think that the second you give a young person a smartphone, they instantly turn into some wretched goblin-type creature, staring at their precious shiny thing in their dank cave, furiously hissing at anyone who tries to take it away.²

That's why I'm writing a book aimed at you, not your parents.

Young people are often *more* able to grasp the facts about the pros and cons of phones.

 ${\bf 2.}$ Gollum, basically. From The Lord of the Rings? If you haven't seen LotR . . . well, I can't help you.

We'll look at the effects of screen time, the impact of phones and technology on your brains, attention spans and memory, whether or not your parents' phone-free childhood was *actually* better, the risks (and benefits) of connecting with people online and loads more.

After all, your youthful brains are still fresh and can retain new ideas and information. They haven't spent decades absorbing the waffle spewed by adults who think Snapchat is a type of breakfast cereal.

So let's get started!

BEFORE WE GET STARTED



Actually, before we begin properly, I need to clear up a few things to make sure we're all (literally) on the same page.

WHAT DID YOU CALL ME?!!?

I explained earlier that the target reader of this book is 'a young person between 11 and 16 years old'. That's a bit wordy, though. I can't keep saying 'young people between 11 and 16 years old' or this book will end up twice as long as it should be!

Unfortunately, there's no single word that specifically means 'young person between 11 and 16 years old'. At least, not as far as I know. And I write words for a job!

I could use 'child'. It would be *technically* correct. But it lumps you in with nursery-school kids and this book's definitely not for them. Also, it's a bit . . . patronizing? After all, at your age you've probably had more than enough of adults lecturing you about what you should and shouldn't be doing or thinking because you're 'a child'. I will only get on your nerves if I do that too.

So, basically, I'll be using a mix of 'young person' and 'teenager' because those are both technically correct and don't sound weird. But whatever term I use, I am definitely referring to you, my 11- to 16-year-old reader.

I don't want to exclude anyone, though.

Most of the things in this book apply **to everyone**.

However, some aspects of technology clearly affect young women more than young men and vice versa. And when you include factors like gender fluidity into it, that makes it more complex again.

So, to make things easier for everyone, I'll try to *include* everyone, in all the things I cover. Except for when that wouldn't make sense. You'll see what I mean soon enough. I hope.



I've said this book is about phones, and it is. But it's not *just* about phones. I say phones to mean *smart*phones, but I'm using smartphones here to represent all devices that parents get worked up about. Sure, it could be your smartphone. It could also be your games console

(Nintendo Switch, Sony PlayStation or whatever), an iPad or similar tablet, a smart TV, a laptop or anything else along these lines.

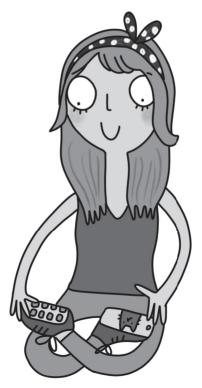


Basically, if it has a screen and allows you to access the internet, that's the sort of modern technology I'm talking about. I just say 'phones', as that's, at the moment, the most common example.

Also, I say 'modern technology', but, if I'm lucky, this book will be read by young people for many years to come. And technology changes *quickly*.

So, while the technology I refer to in the book may be recognizable as I'm writing it, if you're reading this in the future, even the very near future, it may not be.

Maybe by the time you read this you'll be able to watch TikTok videos on the soles of your trainers – and your parents will be getting all worked up about the damage young people are doing to their knees by constantly pulling their feet up to their faces. It could happen!



Luckily for me, technology may change quickly, **but the workings of the**

human brain do not



And I doubt teenagers and their parents will suddenly stop arguing in the next ten years. So most of this book should still be useful. Some of the tech terms and references will be out of date, is all.

Also, even if all the technology I talk about is current, it's still *me* talking about it. Me, a man in his 40s, in the 2020s. I'll definitely end up saying stuff that you find hilariously out of date, without even realizing. Sorry about that. Hopefully it'll be funny for you, at least.

PARENTING ISSUES

When I talk about arguments you have with your parents, I may use terms like 'mum' and 'dad'. They're just the most common examples of parents. But it's not the *only* examples. Far from it.

You may have a single mother or father. You may have two mums or two dads. Maybe you're being raised by grandparents or other relatives or foster or adopted parents.

All these are valid. When I say 'parents', I mean 'the adult or adults responsible for raising you'. And if I say 'mum' or 'dad', that's just . . . me being lazy.

One final point, and it's a serious one: while this book is aimed at helping you deal with phone-based arguments with your parents, I'm assuming that the relationship you have with your parents is normal. By 'normal', I mean that they complain about your phone and device use because, ultimately, they *care* about you. As parents should. They mean well; they just have a different take on the matter, one that may be . . . let's say, 'misinformed'. They *mean* well, but they're not always *right*. Which is pretty much the point of this book.

Sadly, not everyone is that lucky. Some young people's relationships with their parents aren't so positive. They may have parents who are excessively controlling, emotionally distant, competitive, toxic or worse. *Much* worse.

There are many reasons for how this could happen. For now, if you are one of the unfortunate young people with parents like that, there are some resources that might be helpful for your situation at the end of the book.

I think that's everything?

So now let's get started!

CHAPTER 1



'YOU'RE GETTING TOO MUCH SCREEN TIME!'

Let's talk about screens. The flat bit on your phone that lets you use it.

Specifically, let's talk about 'screen time'. Countless parents can get... really weird about their kids spending too much time looking at screens. For instance, maybe you're someone whose parents, or grandparents, insist that looking at a screen too long will 'give you square eves'?

If so, I can relate.

Back in the 1980s, when I was six, I'd watch TV by sitting very close to the screen. Like, *really* close. If a newsreader had had their tonsils removed, I'd have known.

My parents, grandparents and every other adult in my life didn't like this. They'd regularly tell me that sitting so close to the TV would mean I'd 'end up with square eyes'.

Like it was a confirmed medical fact.

Eventually, I went for an eye test, where the optician discovered I was so short-sighted it was a miracle I could see my own feet.³ That's why I was sitting so close to the TV screen: I genuinely couldn't see it. So I got glasses, could see the TV fine and sat at a normal distance away from then on.

The optician never said anything about my eyes being square, though. Why? Because *that's not a thing!* Seriously, how could a screen *change the shape of my eyeballs?*

^{3.} OK, he didn't say those *exact* words. But he could have! I was *really* short-sighted.

In fairness, TV sets in the 1980s were huge brown boxes that weighed as much as a small car. They also produced loads of heat and static electricity and made mysterious noises. Who knows what they had inside them. Gunpowder? Radiation? Infinity Stones? It was anyone's guess.

But still! It's scientifically impossible to have your eyes and bones turned square just by looking at a TV screen. So why did my parents and family keep saying the opposite?

And why am I even telling you this?

Well, it's to show you that parents having a go at their kids for staring at screens isn't a new thing. Despite now being a middle-aged balding adult scientist, part of me will always be that little kid being harassed by his parents for looking at a screen. Even though I wasn't doing anything wrong and their reasons didn't make sense.

If this sounds familiar to you – well, you've come to the right place. So let's look at the actual facts and hard data about screen time.

'WHAT IS SCREEN TIME?'

What exactly is screen time?

The obvious answer is 'time spent looking at a screen'. So that answers that. On to the next chapter!

'NO, SERIOUSLY. WHAT IS SCREEN TIME?'

I *am* being serious. The words 'screen time' include 'screen'. And 'time'. And . . . that's it. Can't think what else it could mean, really.

'OK, FINE. SO WHY ARE OUR PARENTS SO WORRIED ABOUT SCREEN TIME?'

Ah, now that's a good question. But before I answer, let me ask you one in return.

My parents were constantly worrying about me staring at the TV, but that was back when I was a kid. *Your*

parents are much more likely to be worried about – you've guessed it – phones!

However, if you have a parent who's strict about your screen time, what do they do if you're looking at a screen that *isn't* the one on your phone? Do they panic? Try and get between you and the screen to stop it corrupting their precious child? Do they destroy the screen with a heavy object, like it's a scorpion that's found its way into their shoe?

Or do they do what every other parent does, which is absolutely nothing?

The thing is, it's pretty much impossible to avoid looking at screens these days. They're *everywhere*! In schools, libraries, shops, on buses, attached to buildings, in cars, in gyms and so on. Parents and other adults are so convinced screens are bad for kids, that they put them up everywhere and on everything, to the point where you can't *not* look at them . . . Sure, that makes sense.

When research showed that breathing in other people's cigarette smoke was bad for young people, the adults in charge banned smoking in many public places. What

they *didn't* do was assemble a vast army of smokers and tell them to wander the streets and blow smoke into the face of every child they found. That would be ridiculous.

But that's exactly what's happened with screens. So what's going on?

The simplest explanation is that parents and adults don't actually believe that simply looking at a screen (any screen) is bad for you.

Have your parents ever said that you've had enough screen time and then told you to do home learning on your laptop or watch TV with them? That's basically them saying, 'You've been looking at a screen for too long. Look at a different screen instead.' And that . . . doesn't make sense.

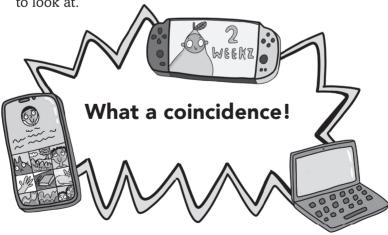
Your parents might say it's not simply *looking* at a screen that's bad for you, it's the amount of *time* spent doing it. Hence the term 'screen *time*'. It's sort of like sugar:

It's nice to have some,

but too much, and it quickly becomes bad for you.

That *still* doesn't explain things, though. If, for example, one hour of screen time a day was the safe amount, you could burn through that in a single morning, without a glance at your phone! Purely thanks to all the screens in the world around us.

No, it seems that most parents, whether they recognize it or not, think only the screen on your phone is harmful. Or the one your video-game console is using. Or the TV showing the videos you like. Basically, it seems like the only screens they worry about are the ones you *like* to look at.



'OK, SO IS THERE ANY REASON WHY STARING AT A SCREEN FOR TOO LONG COULD BE BAD FOR YOU?'

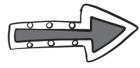
Now we're getting somewhere.

Usually, when parents tell you stop doing something because it's bad for you, you can at least *understand* their concern, whether you agree with them or not.

If they tell you to stop riding a bike without a helmet, it's because they're worried about you falling off or crashing and injuring your head.

If they tell you to stop drinking Coke or energy drinks, they're worried you'll damage your teeth or be so wired you'll struggle to get to sleep at a sensible hour.

If they tell you to stop juggling venomous spiders, it's because they're worried about you being bitten by a confused, angry, toxic arachnid.⁴



^{4.} True, venomous spiders provide *many* things for your parents to worry about. Still, everyone needs a hobby.

But when they tell you to stop looking at screens . . . what are they worried will happen to you, exactly? (And don't say 'square eyes' because we know that's nonsense.)

How can looking at a screen be dangerous or harmful? You're barely even moving when you do it. Nothing on the screen can actually touch you. It's not even really there, technically. Things can't hurt you just by you *looking at them*, after all.

Actually, they can.

'WAIT, THINGS CAN HARM YOU JUST BY LOOKING AT THEM?'

Yes. You can be harmed, or at least affected, just by looking at something.

Take, for instance, a solar eclipse, when the moon briefly blocks out the sun. If you ever got to see an eclipse, you'll have been told repeatedly to *not look directly at it.* You need special glasses or viewers. This is because if the high-energy rays from the sun hit the

retina in your eyes for long enough, they can seriously harm them, damaging your eyesight.⁵

Granted, that's the actual sun. Most things you look at aren't million-mile-wide balls of nuclear fire. Can smaller things affect us, just by being looked at?

Yes. Our eyes and vision aren't like the camera in your phone: they don't just record whatever they're pointed at. Vision is the sense your brain relies on most to figure out what's going on in the world.⁶ Which means certain things we see can trigger odd reactions in our brains.

'WHAT SORT OF THINGS AFFECT US JUST BY LOOKING AT THEM?'

Well, there are colours. Certain colours trigger certain responses in our brain. Bright red can trigger excitement, fear or alarm, while sky blue or light green

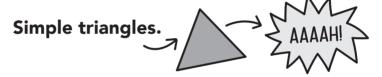
^{5.} Technically, you don't need an eclipse. Looking directly at the sun at any time could lead to this. But during an eclipse is usually the only time we can look at the sun for long enough to cause this damage, as most of its brightness is hidden.

^{6.} Unless you're blind or visually impaired. Then other senses take over. The brain is flexible like that.

produces feelings of calm. That's why you rarely ever see bright red in hospitals (unless a surgery has gone *spectacularly* wrong).

That's another thing: if we look at things like car wrecks or open sewers,⁷ we can become upset or disgusted. Again, looking at things obviously *can* affect us. It just depends what we're looking at.

They don't even need to be vivid or detailed things. Research suggests that our brains can experience anxiety when we look at . . . triangles.



Why? One theory is that our brains evolved over millions of years in the wild, where many of the dangerous things were 'pointy'. The fangs and claws of predators. Jagged rocks. The barbs and stingers of poisonous insects. Thorned plants. All pointy things. And pointy things are *triangular*. So our brain learned to fear triangles. Just to be safe.

⁷. My primary school once took us on a trip to a sewage treatment plant. It was as much fun as it sounds.

It's not a *big* fear reaction, of course. We don't run screaming at the sight of bunting.

It's more like our brain can go from 20 per cent anxious to 20.05 per cent if we see triangles. It's easily ignored. But it's still an example of your brain being affected by simply looking at something.

'SO SCREENS STRESS OUR BRAINS OUT?'

Well, they *can*. But they can also do the opposite. Calming games and apps, mindfulness stuff, meditation videos, chillout music, getting advice and reassurance from others, even the act of putting everything in your calendar or notes can be calming. All these can occur while you're looking at your phone's screen.

Which means it's not so much about stress. But screens can make your brain *work* harder. Sometimes too hard.

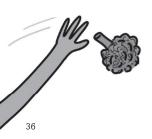
This might sound wrong. Why would watching a video via your phone make your brain work harder than, say, reading a book? After all, both involve staring at a rectangle a few inches from your face. Surely reading

a book, a novel, and decoding all the words and concocting all the characters and places within your own imagination is *more* work for the brain? Compared to watching a video, where everything is made for you in advance?

Unfortunately, our brains don't work that way. They have to process everything we perceive, so presenting your brain with *more* stuff means it has more to deal with.

You know when you're with your parents doing a big shop at the supermarket and have to pack it all into bags at the checkout? Your brain looking at things is like that. With a book, it's like getting a slow cashier, sending one item down the conveyer belt every ten seconds – so bagging everything up is easy.

With screens, especially if you're watching something fast and 'busy', it can be like the cashier is rapidly flinging your groceries towards you. Things end up in the wrong bags, the yoghurts have spilt and so on. It's not that your brain *can't* handle it, it's just more work to do so.



And this will affect you. You've probably noticed that you're really tired after a full day in school, even though you mostly just sit there and listen to teachers talking. But even though you aren't moving around much, your brain is dealing with all the information being thrown at you. And, after a while, that can be as tiring as physical exercise. Similarly, things on a screen, even if they're fun, can eventually be exhausting for your brain.

This is backed up by studies, which show that if you have a concussion, reducing screen time means you recover faster.

Think about it: if your brain needs time to recover and reset from a head injury, making it work harder will slow it down. Just like with a sprained ankle, it will take longer to recover, if you insist on jogging every day.

Overall, it's hard to deny that screens make your brain do more work. And that's not always ideal, because your brain is always doing a lot of work anyway, and it only has so much time and energy to spare. Especially if it's injured and trying to recover. If you make it do more work on top of that, it doesn't help.



'DOES THIS MEAN OUR PARENTS ARE RIGHT? SCREEN TIME IS BAD FOR US?'

If a parent is sneakily reading this, they're probably punching the air in celebration. After all, I've proved them right.

However, if you are that parent . . . slow down, sunshine.

Some parents may point to studies that show that too much screen time is bad for you – and so believe you should put down your phone – and while such studies do exist, most of them happened *before* smartphones were a thing. It was TV screens they were concerned about, something parents are usually less bothered about nowadays. So, technically, these studies don't say anything about phones being bad for you *at all*.8

And even the studies that say screen time is bad for you always include long explanations about how the data is nowhere near as simple as that.

Basically, the reality is much more complicated than 'Phone screens are bad!'

8. And you know what? *Not one* of them mentions anyone getting square eyes!

'SO HOW MUCH SCREEN TIME IS TOO MUCH?'

That's a much harder question than many parents realize.

Yes, looking at screens *can* have unhelpful, even harmful effects on us, like by showing us distressing stuff or slowing down an injured brain's recovery. It makes sense that the longer you spend looking at screens, the more likely these things are to happen. So parents and adults are right to put limits on screen time.

But those same parents aren't bothered when you're looking at screens other than the one on your phone. As I said earlier, that feels a bit . . . convenient.

The truth is far more complex. So much so that obsessing over screen *time* is actually not very helpful. Yes, many people in charge say that a firm limit on screen time is the only way to go. But what do people who've actually studied it say? For instance, the UK's Royal College of Paediatricians (the organization of people responsible for deciding what is or isn't good for young people's health) – what do they say the limit for screen time should be?

Well, they don't. The Royal College of Paediatricians don't advise parents to put firm limits on how much screen time you get.

How screen time affects you is determined more by how you react to it and what is on the screen.

Because screens can show you *anything*. That's basically the point! And you could use your screen to read a book or watch a nature documentary for five hours. Or look at something deeply gory and upsetting for ten minutes. Guess which one will affect you more? In many ways, limiting screen time because it sometimes shows harmful things is like trying to ban shoes because someone's going around kicking people up the bum.

That's not to say unlimited screen time is the way to go.

But when it comes to how screen time affects you, **the most important aspect is . . . you.**

How you respond to it, what you choose to do with it and so on.

In a way, the content you choose to consume is, to your brain, like what the food you eat is to your body. Some of it is healthy and good for you, and some of it is junk food and bad for you. But the junk food is often more *enjoyable* so most people prefer to eat that if they have the choice.

But the thing is, parents may *think* that some screens, like the one on your phone, only provide sugar and junk, so try to keep you away from it. But that's just not the case, scientifically.

So if you're going to be talking to your parents about this matter, it's important that you know as much *actual* information about how screens and phones affect you as possible, right?

Good thing you're reading this book, then!

