WEBVTT

00:00:00.000 --> 00:00:02.490 Support for Yale Cancer Answers

NOTE Confidence: 0.85742927

00:00:02.490 --> 00:00:04.980 comes from AstraZeneca, dedicated

NOTE Confidence: 0.85742927

00:00:05.057 --> 00:00:07.432 to advancing options and providing

NOTE Confidence: 0.85742927

00:00:07.432 --> 00:00:10.420 hope for people living with cancer.

NOTE Confidence: 0.85742927

00:00:10.420 --> 00:00:13.728 More information at astrazeneca-us.com.

NOTE Confidence: 0.85742927

00:00:13.730 --> 00:00:15.626 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.85742927

00:00:15.626 --> 00:00:18.057 your host doctor Anees Chagpar.

NOTE Confidence: 0.85742927

00:00:18.057 --> 00:00:19.897 Yale Cancer Answers features the

NOTE Confidence: 0.85742927

00:00:19.897 --> 00:00:22.142 latest information on cancer care by

NOTE Confidence: 0.85742927

00:00:22.142 --> 00:00:23.590 welcoming oncologists and specialists

NOTE Confidence: 0.85742927

00:00:23.590 --> 00:00:26.055 who are on the forefront of the

NOTE Confidence: 0.85742927

00:00:26.055 --> 00:00:28.200 battle to fight cancer. This week,

NOTE Confidence: 0.85742927

00:00:28.200 --> 00:00:29.955 it's a conversation about understanding

NOTE Confidence: 0.85742927

00:00:29.955 --> 00:00:32.090 medical research with Doctor Perry Wilson.

NOTE Confidence: 0.85742927

00:00:32.090 --> 00:00:34.505 Doctor Wilson is the course director of

NOTE Confidence: 0.85742927

00:00:34.505 --> 00:00:36.313 Interpretation of the medical literature

NOTE Confidence: 0.85742927

00:00:36.313 --> 00:00:38.437 at the Yale School of Medicine,

NOTE Confidence: 0.85742927

00:00:38.440 --> 00:00:40.558 where Doctor Chagpar is a

NOTE Confidence: 0.85742927

00:00:40.558 --> 00:00:41.970 professor of surgical oncology.

NOTE Confidence: 0.82167685

00:00:42.780 --> 00:00:45.516 Perry, maybe we can start off by you

NOTE Confidence: 0.82167685

00:00:45.516 --> 00:00:48.290 telling us a little bit about yourself

NOTE Confidence: 0.82167685

00:00:48.290 --> 00:00:50.845 and what it is that you do.

NOTE Confidence: 0.82167685

00:00:50.850 --> 00:00:52.690 I'm a physician,

NOTE Confidence: 0.82167685

00:00:52.690 --> 00:00:54.525 and I specialize in internal

NOTE Confidence: 0.82167685

00:00:54.525 --> 00:00:55.626 medicine and nephrology,

NOTE Confidence: 0.82167685

00:00:55.630 --> 00:00:56.874 which is kidney diseases.

NOTE Confidence: 0.82167685

00:00:56.874 --> 00:00:59.299 But most of my time is spent

NOTE Confidence: 0.82167685

00:00:59.299 --> 00:01:00.760 doing clinical research.

NOTE Confidence: 0.82167685

00:01:00.760 --> 00:01:02.968 So my lab does clinical trials.

NOTE Confidence: 0.82167685

00:01:02.970 --> 00:01:05.161 We use a lot of what people

NOTE Confidence: 0.82167685

00:01:05.161 --> 00:01:07.369 might call big data approaches.

NOTE Confidence: 0.82167685

00:01:07.370 --> 00:01:09.200 Getting data and analysis into

NOTE Confidence: 0.82167685

00:01:09.200 --> 00:01:10.664 the electronic health record,

NOTE Confidence: 0.82167685

00:01:10.670 --> 00:01:14.410 but I think one of my real passions has been

NOTE Confidence: 0.82167685

00:01:14.410 --> 00:01:15.850 trying to explain medical

NOTE Confidence: 0.82167685

00:01:15.850 --> 00:01:17.290 research to everyone.

NOTE Confidence: 0.82167685

00:01:17.290 --> 00:01:19.810 It's something that I love to do.

NOTE Confidence: 0.82167685

00:01:19.810 --> 00:01:21.094 I love medical research.

NOTE Confidence: 0.82167685

00:01:21.094 --> 00:01:23.020 I think it's

NOTE Confidence: 0.82167685

00:01:23.083 --> 00:01:24.491 transformed humanity over the

NOTE Confidence: 0.82167685

00:01:24.491 --> 00:01:27.098 past century and I want to share

NOTE Confidence: 0.82167685

00:01:27.098 --> 00:01:28.810 that enthusiasm with people.

NOTE Confidence: 0.82167685

00:01:28.810 --> 00:01:30.938 And so I've been, on my

NOTE Confidence: 0.82167685

00:01:30.938 --> 00:01:33.351 off hours, writing columns

NOTE Confidence: 0.82167685

00:01:33.351 --> 00:01:35.606 about new medical studies trying

NOTE Confidence: 0.82167685

00:01:35.606 --> 00:01:38.562 to get people as excited as I am

NOTE Confidence: 0.82167685

00:01:38.562 --> 00:01:40.330 about the medical research process.

00:01:41.050 --> 00:01:43.180 And that's such a great

NOTE Confidence: 0.86627406

00:01:43.180 --> 00:01:45.660 thing to kick off with because,

NOTE Confidence: 0.86627406

00:01:45.660 --> 00:01:47.433 especially this year,

NOTE Confidence: 0.86627406

00:01:47.433 --> 00:01:50.388 there's been a lot of

NOTE Confidence: 0.86627406

00:01:50.390 --> 00:01:50.786 misinformation,

NOTE Confidence: 0.86627406

00:01:50.786 --> 00:01:52.370 a lot of ambiguity,

NOTE Confidence: 0.86627406

00:01:52.370 --> 00:01:55.034 a lot of trepidation on the part of

NOTE Confidence: 0.86627406

00:01:55.034 --> 00:01:57.907 the general public about medical research,

NOTE Confidence: 0.86627406

00:01:57.910 --> 00:02:00.614 so maybe you can start off by talking

NOTE Confidence: 0.86627406

00:02:00.614 --> 00:02:04.292 to us a little bit about how that

NOTE Confidence: 0.86627406

00:02:04.292 --> 00:02:05.753 misinformation gets propagated

NOTE Confidence: 0.86627406

00:02:05.753 --> 00:02:08.207 and what we can do about it.

NOTE Confidence: 0.84967345

00:02:08.890 --> 00:02:10.846 Sure, Covid has really turned

NOTE Confidence: 0.84967345

00:02:10.846 --> 00:02:13.160 up the level of medical misinformation.

NOTE Confidence: 0.84967345

00:02:13.160 --> 00:02:15.874 It's always been out there.

NOTE Confidence: 0.84967345

00:02:15.874 --> 00:02:18.583 It's even before the Internet there were

NOTE Confidence: 0.84967345

00:02:18.590 --> 00:02:20.670 people coming through

NOTE Confidence: 0.84967345

00:02:20.670 --> 00:02:22.750 with their patent medicines and

NOTE Confidence: 0.84967345

00:02:22.823 --> 00:02:25.133 tonics and trying to force

NOTE Confidence: 0.84967345

00:02:25.133 --> 00:02:27.808 something in a vial on an unsuspecting

NOTE Confidence: 0.84967345

00:02:27.808 --> 00:02:30.226 population that will always be there.

NOTE Confidence: 0.84967345

00:02:30.230 --> 00:02:32.631 There will always be people trying to

NOTE Confidence: 0.84967345

00:02:32.631 --> 00:02:35.269 make a buck from fake information,

NOTE Confidence: 0.84967345

00:02:35.270 --> 00:02:37.937 but as the Internet exploded and access

NOTE Confidence: 0.84967345

00:02:37.937 --> 00:02:40.079 to information became more available

NOTE Confidence: 0.84967345

00:02:40.080 --> 00:02:42.096 as social media exploded and the sharing

NOTE Confidence: 0.84967345

00:02:42.096 --> 00:02:43.534 of information became

NOTE Confidence: 0.84967345

00:02:43.534 --> 00:02:45.543 exponentially easier and then now with covid,

NOTE Confidence: 0.84967345

00:02:45.550 --> 00:02:48.118 it was really this perfect storm of medical

NOTE Confidence: 0.84967345

00:02:48.118 --> 00:02:50.158 information that we were

NOTE Confidence: 0.84967345

00:02:50.160 --> 00:02:51.600 all hit with.

NOTE Confidence: 0.84967345

00:02:51.600 --> 00:02:53.800 It was the first time I can remember

NOTE Confidence: 0.84967345

00:02:53.800 --> 00:02:54.976 where literally everyone was

NOTE Confidence: 0.84967345

00:02:54.976 --> 00:02:56.971 searching for the same thing on line

NOTE Confidence: 0.84967345

00:02:56.971 --> 00:02:58.798 when it comes to medical studies.

NOTE Confidence: 0.84967345

00:02:58.800 --> 00:02:59.634 So before covid,

NOTE Confidence: 0.84967345

00:02:59.634 --> 00:03:01.580 you had people that were

NOTE Confidence: 0.84967345

00:03:01.637 --> 00:03:03.437 looking for the latest diet that

NOTE Confidence: 0.84967345

00:03:03.437 --> 00:03:05.420 would help them lose a few pounds.

NOTE Confidence: 0.84967345

00:03:05.420 --> 00:03:06.464 And then

NOTE Confidence: 0.84967345

00:03:06.464 --> 00:03:08.361 of course you had people who might

NOTE Confidence: 0.84967345

00:03:08.361 --> 00:03:10.230 have had a new diagnosis like a

NOTE Confidence: 0.84967345

00:03:10.230 --> 00:03:12.048 new cancer diagnosis for example,

NOTE Confidence: 0.84967345

00:03:12.050 --> 00:03:13.370 and they're searching that.

NOTE Confidence: 0.84967345

00:03:13.370 --> 00:03:14.690 And there's misinformation in

NOTE Confidence: 0.84967345

00:03:14.690 --> 00:03:15.750 all those spaces,

NOTE Confidence: 0.84967345

00:03:15.750 --> 00:03:18.396 but all of a sudden 2020 comes and every

NOTE Confidence: 0.84967345

00:03:18.396 --> 00:03:20.601 single person is searching for any

NOTE Confidence: 0.84967345

00:03:20.601 --> 00:03:22.890 information they can find about covid.

NOTE Confidence: 0.84967345

00:03:22.890 --> 00:03:24.684 And in that environment you are

NOTE Confidence: 0.84967345

00:03:24.684 --> 00:03:27.310 going to get a lot of misinformation

NOTE Confidence: 0.88626456

00:03:27.310 --> 00:03:29.690 out there. And that's exactly what happened.

NOTE Confidence: 0.88626456

00:03:29.690 --> 00:03:31.162 But you know, Perry,

NOTE Confidence: 0.88626456

00:03:31.162 --> 00:03:33.002 it's really interesting because for

NOTE Confidence: 0.88626456

00:03:33.002 --> 00:03:35.027 many people they think the Internet

NOTE Confidence: 0.88626456

00:03:35.027 --> 00:03:37.010 was really the boon of information

NOTE Confidence: 0.88626456

00:03:37.010 --> 00:03:39.243 sharing and a great way for people

NOTE Confidence: 0.88626456

00:03:39.243 --> 00:03:41.446 to get high quality information and

NOTE Confidence: 0.88626456

00:03:41.446 --> 00:03:43.780 disseminate it across a large population.

NOTE Confidence: 0.88626456

00:03:43.780 --> 00:03:46.811 So I think one of the key issues is how do

NOTE Confidence: 0.88626456

00:03:46.811 --> 00:03:49.491 people distinguish from good information

NOTE Confidence: 0.88626456

00:03:49.491 --> 00:03:51.635 factual information versus misinformation.

NOTE Confidence: 0.88626456

00:03:51.640 --> 00:03:53.998 Both of them seem to be

NOTE Confidence: 0.88626456

00:03:53.998 --> 00:03:55.570 apparent on the Internet,

NOTE Confidence: 0.88626456

00:03:55.570 --> 00:03:58.706 but sometimes it's hard to tell them apart.

NOTE Confidence: 0.88626456

00:03:58.710 --> 00:03:59.498 Yeah, absolutely.

NOTE Confidence: 0.88626456

00:03:59.498 --> 00:04:00.680 And this is

NOTE Confidence: 0.89763194

00:04:00.680 --> 00:04:02.645 one of the double edged

NOTE Confidence: 0.89763194

00:04:02.645 --> 00:04:04.610 swords of our information age.

NOTE Confidence: 0.89763194

00:04:04.610 --> 00:04:07.368 So one thing I always remind

NOTE Confidence: 0.89763194

00:04:07.368 --> 00:04:10.515 people is that there is such a thing

NOTE Confidence: 0.89763194

00:04:10.515 --> 00:04:13.259 as a bad medical study. There is

NOTE Confidence: 0.89763194

00:04:13.260 --> 00:04:15.969 good data and bad data.

NOTE Confidence: 0.89763194

00:04:15.970 --> 00:04:18.497 There are good studies and bad studies,

NOTE Confidence: 0.89763194

00:04:18.500 --> 00:04:20.642 and when access to that information

NOTE Confidence: 0.89763194

00:04:20.642 --> 00:04:22.858 is so readily available so unfiltered

NOTE Confidence: 0.89763194

00:04:22.858 --> 00:04:24.673 or sometimes just filtered through

NOTE Confidence: 0.89763194

00:04:24.673 --> 00:04:27.217 the sort of biases of whoever's on

NOTE Confidence: 0.89763194

00:04:27.217 --> 00:04:29.246 your social media feed, it

NOTE Confidence: 0.89763194

00:04:29.246 --> 00:04:31.154 has become really easy to

NOTE Confidence: 0.89763194

00:04:31.154 --> 00:04:32.698 find information that confirms

NOTE Confidence: 0.89763194

00:04:32.698 --> 00:04:34.386 your previously held beliefs,

NOTE Confidence: 0.89763194

00:04:34.390 --> 00:04:37.070 and if there is one thing I sort

NOTE Confidence: 0.89763194

00:04:37.070 --> 00:04:39.725 of caution people against when they

NOTE Confidence: 0.89763194

00:04:39.725 --> 00:04:42.105 go looking for information is,

NOTE Confidence: 0.89763194

00:04:42.110 --> 00:04:43.916 do it with an open mind.

NOTE Confidence: 0.89763194

00:04:43.920 --> 00:04:46.069 Don't try to find things that confirm

NOTE Confidence: 0.89763194

00:04:46.069 --> 00:04:48.129 what you already believe to be true,

NOTE Confidence: 0.89763194

00:04:48.130 --> 00:04:49.798 because maybe that worked back in

NOTE Confidence: 0.89763194

00:04:49.798 --> 00:04:51.975 the day when you went into the

NOTE Confidence: 0.89763194

00:04:51.975 --> 00:04:53.311 encyclopedia and everything was

NOTE Confidence: 0.89763194

00:04:53.311 --> 00:04:55.485 sort of nicely laid out and had

NOTE Confidence: 0.89763194

00:04:55.485 --> 00:04:57.153 been vetted by an editorial board

NOTE Confidence: 0.89763194

00:04:57.160 --> 00:04:58.700 and things like that.

NOTE Confidence: 0.89763194

00:04:58.700 --> 00:05:01.300 But the problem with social media is

NOTE Confidence: 0.89763194

00:05:01.300 --> 00:05:03.395 similar beliefs cluster together. The

NOTE Confidence: 0.89763194

00:05:03.395 --> 00:05:05.490 social media algorithms on Twitter

NOTE Confidence: 0.89763194

00:05:05.550 --> 00:05:07.776 and Facebook and Instagram and all of

NOTE Confidence: 0.89763194

00:05:07.776 --> 00:05:10.447 the social media companies work the same way.

NOTE Confidence: 0.89763194

00:05:10.450 --> 00:05:12.646 They are designed to maximize engagement,

NOTE Confidence: 0.89763194

00:05:12.650 --> 00:05:14.840 which is eyeballs on the screen,

NOTE Confidence: 0.89763194

00:05:14.840 --> 00:05:15.570 clicks, likes,

NOTE Confidence: 0.89763194

00:05:15.570 --> 00:05:16.300 retweets etc.

NOTE Confidence: 0.89763194

00:05:16.300 --> 00:05:17.395 In that environment,

NOTE Confidence: 0.89763194

00:05:17.400 --> 00:05:19.716 things that are nuanced that are

NOTE Confidence: 0.89763194

00:05:19.716 --> 00:05:22.012 subtle that don't sort of confirm

NOTE Confidence: 0.89763194

00:05:22.012 --> 00:05:24.371 what people want to be true don't

NOTE Confidence: 0.89763194

00:05:24.371 --> 00:05:26.188 get a lot of engagement,

NOTE Confidence: 0.89763194

00:05:26.190 --> 00:05:28.608 and those things that are more

NOTE Confidence: 0.89763194

00:05:28.608 --> 00:05:30.631 exciting and dramatic,

NOTE Confidence: 0.89763194

00:05:30.631 --> 00:05:32.997 we've got a cure for covid in

NOTE Confidence: 0.89763194

00:05:32.997 --> 00:05:34.900 our medicine chest right now.

NOTE Confidence: 0.89763194

00:05:34.900 --> 00:05:37.224 It gets a ton of engagement and one

NOTE Confidence: 0.89763194

00:05:37.224 --> 00:05:39.711 of the things that we used to be

NOTE Confidence: 0.89763194

00:05:39.711 --> 00:05:41.920 able to do as humans was trust

NOTE Confidence: 0.89763194

00:05:41.920 --> 00:05:44.076 what we perceive as the majority opinion

NOTE Confidence: 0.89763194

00:05:44.076 --> 00:05:46.696 when a lot of people share an opinion,

NOTE Confidence: 0.89763194

00:05:46.700 --> 00:05:49.252 we would go around in our social lives

NOTE Confidence: 0.89763194

00:05:49.252 --> 00:05:51.170 and say, oh that's probably true.

00:05:51.810 --> 00:05:53.718 Most people sort of think this,

NOTE Confidence: 0.89763194

00:05:53.720 --> 00:05:55.771 and I've heard this from a number

NOTE Confidence: 0.89763194

00:05:55.771 --> 00:05:57.550 of people in social media,

NOTE Confidence: 0.89763194

00:05:57.550 --> 00:05:59.598 now it's possible to go down a rabbit

NOTE Confidence: 0.89763194

00:05:59.598 --> 00:06:01.211 hole of misinformation where every

NOTE Confidence: 0.89763194

00:06:01.211 --> 00:06:04.123 voice you see every link you click is

NOTE Confidence: 0.89763194

00:06:04.123 --> 00:06:05.807 reinforcing the false information.

NOTE Confidence: 0.89763194

00:06:05.810 --> 00:06:08.274 And what you then get is this

NOTE Confidence: 0.89763194

00:06:08.274 --> 00:06:09.780 erroneous perception that there's

NOTE Confidence: 0.89763194

00:06:09.780 --> 00:06:12.084 this wealth of data out there

NOTE Confidence: 0.89763194

00:06:12.084 --> 00:06:13.750 that's supporting your belief,

NOTE Confidence: 0.89763194

00:06:13.750 --> 00:06:16.502 when in fact it's all this

NOTE Confidence: 0.89763194

00:06:16.502 --> 00:06:18.280 self perpetuating engagement,

NOTE Confidence: 0.89763194

00:06:18.280 --> 00:06:21.184 and you've got to be able to

NOTE Confidence: 0.89763194

00:06:21.184 --> 00:06:22.819 get out of there.

NOTE Confidence: 0.89763194

00:06:22.820 --> 00:06:25.836 The easiest way is right off the bat,

NOTE Confidence: 0.89763194

00:06:25.840 --> 00:06:27.396 be honest with yourself.

NOTE Confidence: 0.89763194

00:06:27.396 --> 00:06:30.379 Ask yourself what you want to be true,

NOTE Confidence: 0.89763194

00:06:30.380 --> 00:06:33.271 and recognize that if you find data

NOTE Confidence: 0.89763194

00:06:33.271 --> 00:06:36.119 that supports what you want to be true,

NOTE Confidence: 0.89763194

00:06:36.120 --> 00:06:38.742 you even have to be extra

NOTE Confidence: 0.89763194

00:06:38.742 --> 00:06:40.750 skeptical about that type of

NOTE Confidence: 0.8528198

00:06:40.750 --> 00:06:43.276 data.

NOTE Confidence: 0.8528198

00:06:43.280 --> 00:06:46.220 I just finished reading Adam Grant's book,

NOTE Confidence: 0.8528198

00:06:46.220 --> 00:06:48.516 Think Again, which for if anybody is

NOTE Confidence: 0.8528198

00:06:48.516 --> 00:06:52.667 a big fan of Adam Grant or enjoys

NOTE Confidence: 0.8528198

00:06:52.667 --> 00:06:54.212 reading organizational psychologists,

NOTE Confidence: 0.8528198

00:06:54.220 --> 00:06:55.852 I highly recommend it.

NOTE Confidence: 0.8528198

00:06:55.852 --> 00:06:58.907 But it's exactly to your point about

NOTE Confidence: 0.8528198

00:06:58.907 --> 00:07:01.537 rethinking your biases.

NOTE Confidence: 0.8528198

00:07:01.540 --> 00:07:03.076 But you know Perry,

NOTE Confidence: 0.8528198

00:07:03.076 --> 00:07:04.613 it's really difficult, right?

NOTE Confidence: 0.8528198

00:07:04.613 --> 00:07:07.294 Because if you are looking for something,

NOTE Confidence: 0.8528198

00:07:07.300 --> 00:07:09.220 something appears to be true,

NOTE Confidence: 0.8528198

00:07:09.220 --> 00:07:12.664 it fits with your gut,

NOTE Confidence: 0.8528198

00:07:12.670 --> 00:07:14.098 you're more likely to

NOTE Confidence: 0.8528198

00:07:14.098 --> 00:07:15.526 think that that's right,

NOTE Confidence: 0.8528198

00:07:15.530 --> 00:07:17.666 so are there any objective ways

NOTE Confidence: 0.8528198

00:07:17.670 --> 00:07:18.340 for example,

NOTE Confidence: 0.8528198

00:07:18.340 --> 00:07:21.464 if patients or the people

NOTE Confidence: 0.8528198

00:07:21.464 --> 00:07:24.089 who are listening to our show today,

NOTE Confidence: 0.8528198

00:07:24.090 --> 00:07:25.875 they may have just been

NOTE Confidence: 0.8528198

00:07:25.875 --> 00:07:26.946 diagnosed with cancer,

NOTE Confidence: 0.8528198

00:07:26.950 --> 00:07:29.687 or they may be looking for other

NOTE Confidence: 0.8528198

00:07:29.687 --> 00:07:31.239 medical information and it's

NOTE Confidence: 0.8528198

00:07:31.239 --> 00:07:33.374 so easy to go to the Internet.

NOTE Confidence: 0.8528198

00:07:33.380 --> 00:07:35.160 Information at our fingertips.

NOTE Confidence: 0.8528198

00:07:35.160 --> 00:07:38.065 Are there any ways that you can

NOTE Confidence: 0.8528198

00:07:38.065 --> 00:07:39.720 really distinguish, intangible ways,

NOTE Confidence: 0.8528198

00:07:39.720 --> 00:07:43.020 Igood information versus garbage?

00:07:45.463 --> 00:07:47.368 There certainly are and it

NOTE Confidence: 0.85166556

00:07:47.370 --> 00:07:49.680 does take a

NOTE Confidence: 0.85166556

00:07:49.680 --> 00:07:52.320 little bit of work and

NOTE Confidence: 0.85166556

00:07:52.320 --> 00:07:54.738 it's the hardest thing in the

NOTE Confidence: 0.85166556

00:07:54.738 --> 00:07:56.350 world to disregard information

NOTE Confidence: 0.85166556

00:07:56.425 --> 00:07:58.040 that feels right to you.

NOTE Confidence: 0.85166556

00:07:58.040 --> 00:08:01.152 That speaks to you in that way because

NOTE Confidence: 0.85166556

00:08:01.152 --> 00:08:04.887 that is a very human thing that we all do.

NOTE Confidence: 0.85166556

00:08:04.890 --> 00:08:07.158 But I can

NOTE Confidence: 0.85166556

00:08:07.158 --> 00:08:09.469 give you a couple of tips.

NOTE Confidence: 0.85166556

00:08:09.470 --> 00:08:11.042 So number one,

NOTE Confidence: 0.85166556

00:08:11.042 --> 00:08:12.614 is that biologic plausibility

NOTE Confidence: 0.85166556

00:08:12.614 --> 00:08:14.189 is only the start of

NOTE Confidence: 0.85166556

00:08:14.190 --> 00:08:16.266 medical research, not the end,

NOTE Confidence: 0.85166556

00:08:16.270 --> 00:08:18.220 and what I mean by biologic

NOTE Confidence: 0.85166556

00:08:18.220 --> 00:08:19.951 plausibility is when something is

NOTE Confidence: 0.85166556

00:08:19.951 --> 00:08:21.816 stated that makes sense biologically.

00:08:23.555 --> 00:08:25.290 To give you an example,

NOTE Confidence: 0.85166556

00:08:25.290 --> 00:08:28.760 if I told you that if

NOTE Confidence: 0.85166556

00:08:28.760 --> 00:08:31.544 I wrapped my necktie around my head, it would

NOTE Confidence: 0.85166556

00:08:31.544 --> 00:08:34.320 help the arthritis in my knees,

NOTE Confidence: 0.85166556

00:08:34.320 --> 00:08:35.756 that's not biologically plausible.

NOTE Confidence: 0.85166556

00:08:35.756 --> 00:08:37.551 There's no real reason to

NOTE Confidence: 0.85166556

00:08:37.551 --> 00:08:39.167 think that that should work,

NOTE Confidence: 0.85166556

00:08:39.170 --> 00:08:41.946 so we don't pay much attention to that.

NOTE Confidence: 0.85166556

00:08:41.950 --> 00:08:44.032 But there are lots of examples

NOTE Confidence: 0.85166556

00:08:44.032 --> 00:08:45.502 of things that seem

NOTE Confidence: 0.85166556

00:08:45.502 --> 00:08:47.036 biologically plausible, for example,

NOTE Confidence: 0.85166556

00:08:47.036 --> 00:08:49.328 we know that as you age,

NOTE Confidence: 0.85166556

00:08:49.330 --> 00:08:51.724 there's more oxidative stress in your

NOTE Confidence: 0.85166556

00:08:51.724 --> 00:08:54.039 body and that oxidative stress might

NOTE Confidence: 0.85166556

00:08:54.039 --> 00:08:56.655 lead to some of the symptoms of aging

NOTE Confidence: 0.85166556

00:08:56.721 --> 00:08:58.876 like arthritis and stuff.

NOTE Confidence: 0.85166556

00:08:58.880 --> 00:09:00.950 We also have a chemical called

NOTE Confidence: 0.85166556

00:09:00.950 --> 00:09:03.459 vitamin E which is an antioxidant,

NOTE Confidence: 0.85166556

00:09:03.460 --> 00:09:05.370 and well reported as an antioxidant.

NOTE Confidence: 0.85166556

00:09:05.370 --> 00:09:06.498 It's biologically plausible,

NOTE Confidence: 0.85166556

00:09:06.498 --> 00:09:08.754 then that vitamin E would be

NOTE Confidence: 0.85166556

00:09:08.754 --> 00:09:10.720 good at helping against aging.

NOTE Confidence: 0.85166556

00:09:10.720 --> 00:09:12.248 Maybe might prevent heart

NOTE Confidence: 0.85166556

00:09:12.248 --> 00:09:14.158 attacks and things like that.

NOTE Confidence: 0.85166556

00:09:14.160 --> 00:09:16.925 Now a lot of people stop there.

NOTE Confidence: 0.85166556

00:09:16.930 --> 00:09:18.610 They say, oh that's biologically plausible.

NOTE Confidence: 0.85166556

00:09:18.610 --> 00:09:20.010 Oxidation is bad,

NOTE Confidence: 0.85166556

00:09:20.010 --> 00:09:21.410 antioxidant is good, vitamin E

NOTE Confidence: 0.85166556

00:09:21.410 --> 00:09:23.090 is cheap, it's at my drugstore.

NOTE Confidence: 0.85166556

00:09:23.090 --> 00:09:24.490 There's very limited side effects.

NOTE Confidence: 0.85166556

00:09:24.490 --> 00:09:25.890 You know this is great.

NOTE Confidence: 0.85166556

00:09:25.890 --> 00:09:27.759 It helps to confirm a belief that

NOTE Confidence: 0.85166556

00:09:27.759 --> 00:09:30.154 many of us want to be true that we

NOTE Confidence: 0.85166556

00:09:30.154 --> 00:09:32.328 can take charge of our lives without

00:09:32.882 --> 00:09:34.262 paying pharmaceutical companies and

NOTE Confidence: 0.85166556

00:09:34.262 --> 00:09:35.970 without having side effects.

NOTE Confidence: 0.85166556

00:09:35.970 --> 00:09:38.210 So there's a lot going for vitamin E,

NOTE Confidence: 0.85166556

00:09:38.210 --> 00:09:39.890 but let me tell you what

NOTE Confidence: 0.85166556

00:09:39.890 --> 00:09:41.010 happened with Vitamin E.

NOTE Confidence: 0.85166556

00:09:41.010 --> 00:09:42.984 They did a randomized trial of vitamin

NOTE Confidence: 0.85166556

00:09:42.984 --> 00:09:45.578 E and people who are at risk of heart

NOTE Confidence: 0.85166556

00:09:45.578 --> 00:09:47.260 disease and actually found not only

NOTE Confidence: 0.85166556

00:09:47.260 --> 00:09:48.925 was there no difference in

NOTE Confidence: 0.85166556

00:09:48.925 --> 00:09:50.590 the rate of heart attacks,

NOTE Confidence: 0.85166556

00:09:50.590 --> 00:09:51.918 the people taking vitamin

NOTE Confidence: 0.85166556

00:09:51.918 --> 00:09:53.246 E compared to placebo,

NOTE Confidence: 0.85166556

00:09:53.250 --> 00:09:54.915 but the people taking vitamin E

NOTE Confidence: 0.85166556

00:09:54.915 --> 00:09:56.580 had more heart failure.

NOTE Confidence: 0.85166556

00:09:56.580 --> 00:09:58.300 Statistically more heart failure than

NOTE Confidence: 0.85166556

00:09:58.300 --> 00:10:00.580 those taking placebo and again and again

NOTE Confidence: 0.85166556

00:10:00.580 --> 00:10:01.246 in medicine

NOTE Confidence: 0.85166556

00:10:01.246 --> 00:10:02.578 we see biologic plausibility,

NOTE Confidence: 0.85166556

00:10:02.580 --> 00:10:04.240 and actual efficacy getting untied.

NOTE Confidence: 0.85166556

00:10:04.240 --> 00:10:06.641 So what I tell people is that

NOTE Confidence: 0.85166556

00:10:06.641 --> 00:10:08.360 biologically plausible thing that you

NOTE Confidence: 0.85166556

00:10:08.360 --> 00:10:10.565 read about, like oh this is interesting,

NOTE Confidence: 0.85166556

00:10:10.903 --> 00:10:12.568 it works in cell culture,

NOTE Confidence: 0.85166556

00:10:12.570 --> 00:10:14.789 the mice seem to respond to this

NOTE Confidence: 0.85166556

00:10:14.789 --> 00:10:17.287 and it all sort of makes sense

NOTE Confidence: 0.85166556

00:10:17.290 --> 00:10:19.048 with how we understand the world,

NOTE Confidence: 0.85166556

00:10:19.050 --> 00:10:21.094 that's great, but that's only the beginning.

NOTE Confidence: 0.85166556

00:10:21.100 --> 00:10:23.436 You really want to see that randomized trial,

NOTE Confidence: 0.85166556

00:10:23.440 --> 00:10:24.600 not because

NOTE Confidence: 0.85166556

00:10:24.600 --> 00:10:26.670 I'm the kind of guy who

00:10:27.670 --> 00:10:29.170 I'm just following the rules and

NOTE Confidence: 0.85166556

00:10:29.222 --> 00:10:31.057 everything needs a randomized trial,

NOTE Confidence: 0.85166556

00:10:31.060 --> 00:10:32.525 it's because we've been burned

NOTE Confidence: 0.85166556

00:10:32.525 --> 00:10:33.697 so many times before,

NOTE Confidence: 0.8710388

00:10:33.700 --> 00:10:36.036 and I think that's what people don't realize.

NOTE Confidence: 0.8710388

00:10:36.040 --> 00:10:37.212 It's not like jumping

NOTE Confidence: 0.8710388

00:10:37.212 --> 00:10:38.384 through an arbitrary hoop.

NOTE Confidence: 0.8710388

00:10:38.390 --> 00:10:40.133 We've been wrong a lot when it

NOTE Confidence: 0.8710388

00:10:40.133 --> 00:10:41.610 comes to biologic plausibility,

NOTE Confidence: 0.8710388

00:10:41.610 --> 00:10:43.290 so I really do tell people

NOTE Confidence: 0.8710388

00:10:43.290 --> 00:10:44.830 we want a randomized trial.

NOTE Confidence: 0.8710388

00:10:44.830 --> 00:10:47.850 And if you want to be really sure you're not

NOTE Confidence: 0.8710388

00:10:47.850 --> 00:10:49.638 swallowing some patent medicine,

NOTE Confidence: 0.8710388

00:10:49.640 --> 00:10:52.313 you want to see a replication of that study.

NOTE Confidence: 0.8710388

00:10:52.320 --> 00:10:54.416 You want to see more than one study

NOTE Confidence: 0.8710388

00:10:54.416 --> 00:10:56.639 showing the same thing and ideally

NOTE Confidence: 0.8710388

00:10:56.639 --> 00:10:58.279 studies done by different people.

NOTE Confidence: 0.8710388

00:10:58.280 --> 00:11:00.359 You know different groups across the country

NOTE Confidence: 0.8710388

00:11:00.359 --> 00:11:02.448 or in different countries in the world.

NOTE Confidence: 0.8710388

00:11:02.450 --> 00:11:04.536 That's how you build an evidence base.

NOTE Confidence: 0.8710388

00:11:04.540 --> 00:11:05.431 And of course,

NOTE Confidence: 0.8710388

00:11:05.431 --> 00:11:07.188 that's what doctors jobs are, right?

NOTE Confidence: 0.8710388

00:11:07.188 --> 00:11:09.064 So one of the easiest things you

NOTE Confidence: 0.8710388

00:11:09.064 --> 00:11:11.271 can do if you have a trusted

NOTE Confidence: 0.8710388

00:11:11.271 --> 00:11:12.876 healthcare provider in your life,

NOTE Confidence: 0.8710388

00:11:12.880 --> 00:11:16.160 it is our job to be doing this and

NOTE Confidence: 0.8710388

00:11:16.160 --> 00:11:17.880 ask them. Talk to them.

NOTE Confidence: 0.8710388

00:11:17.880 --> 00:11:20.582 We're often excited to talk to you

NOTE Confidence: 0.8710388

00:11:20.582 --> 00:11:22.940 about what's real and what's not,

NOTE Confidence: 0.8710388

00:11:22.940 --> 00:11:23.716 and again,

NOTE Confidence: 0.8710388

00:11:23.716 --> 00:11:25.656 just hear it with an

NOTE Confidence: 0.8829901

00:11:25.660 --> 00:11:27.711 open mind.

NOTE Confidence: 0.8829901

00:11:27.711 --> 00:11:30.206 In terms of the information of looking

NOTE Confidence: 0.8829901

00:11:30.206 --> 00:11:32.270 for randomized control trials,

NOTE Confidence: 0.8829901

00:11:32.270 --> 00:11:33.822 especially that are all

NOTE Confidence: 0.8829901

00:11:33.822 --> 00:11:35.762 going in the same direction,

NOTE Confidence: 0.8829901

00:11:35.770 --> 00:11:38.056 because we've all seen randomized

NOTE Confidence: 0.8829901

00:11:38.056 --> 00:11:40.429 control trials that then are disproven

NOTE Confidence: 0.8829901

00:11:40.429 --> 00:11:43.000 by other randomized control trials.

NOTE Confidence: 0.8829901

00:11:43.000 --> 00:11:44.284 But you know, Perry,

NOTE Confidence: 0.8829901

00:11:44.284 --> 00:11:46.210 it's so difficult for the general

NOTE Confidence: 0.8829901

00:11:46.271 --> 00:11:48.386 public to actually access good

NOTE Confidence: 0.8829901

00:11:48.386 --> 00:11:49.655 randomized control trials.

NOTE Confidence: 0.8829901

00:11:49.660 --> 00:11:52.676 They're not really going to pubMed and

NOTE Confidence: 0.8829901

00:11:52.676 --> 00:11:54.815 searching the medical literature and

NOTE Confidence: 0.8829901

00:11:54.815 --> 00:11:57.860 looking at things with a critical eye.

NOTE Confidence: 0.8829901

00:11:57.860 --> 00:12:00.700 And in terms of talking to their doctor,

NOTE Confidence: 0.8829901

00:12:00.700 --> 00:12:03.185 that's certainly a great way to start.

NOTE Confidence: 0.8829901

00:12:03.190 --> 00:12:05.062 But there are also quote doctors

NOTE Confidence: 0.8829901

00:12:05.062 --> 00:12:07.623 who you can find on line who

NOTE Confidence: 0.8829901

00:12:07.623 --> 00:12:08.865 are spewing misinformation.

NOTE Confidence: 0.8829901

00:12:08.870 --> 00:12:12.056 So how do you kind of get around that?

NOTE Confidence: 0.86535734

00:12:13.400 --> 00:12:16.469 You've got to be careful,

NOTE Confidence: 0.86535734

00:12:16.470 --> 00:12:18.857 really anything that comes from social media,

NOTE Confidence: 0.86535734

00:12:18.860 --> 00:12:20.560 whether it's YouTube or Twitter.

NOTE Confidence: 0.86535734

00:12:20.560 --> 00:12:22.270 And hey, I'm on Twitter,

NOTE Confidence: 0.86535734

00:12:22.270 --> 00:12:24.363 but you do have to be careful

NOTE Confidence: 0.86535734

00:12:24.363 --> 00:12:26.699 because of the echo chamber effect.

NOTE Confidence: 0.86535734

00:12:26.700 --> 00:12:29.388 Someone can sort of wear the mantle of

NOTE Confidence: 0.86535734

00:12:29.388 --> 00:12:31.877 authority on social media based on sort

NOTE Confidence: 0.86535734

00:12:31.877 --> 00:12:34.342 of the number of followers and stuff

NOTE Confidence: 0.86535734

00:12:34.342 --> 00:12:36.926 that they have and that might make what

NOTE Confidence: 0.86535734

00:12:36.930 --> 00:12:38.630 they're saying seem more believable,

NOTE Confidence: 0.86535734

00:12:38.630 --> 00:12:40.340 when in fact it's not.

NOTE Confidence: 0.86535734

00:12:40.340 --> 00:12:43.156 And so you know, social media is fun.

NOTE Confidence: 0.86535734

00:12:43.160 --> 00:12:44.830 And interesting and a great

NOTE Confidence: 0.86535734

00:12:44.830 --> 00:12:46.166 place to share pictures.

NOTE Confidence: 0.86535734

00:12:46.170 --> 00:12:47.835 It's not where I recommend

NOTE Confidence: 0.86535734

00:12:47.835 --> 00:12:49.167 people do their research

NOTE Confidence: 0.86535734

00:12:49.170 --> 00:12:50.220 for medical questions.

NOTE Confidence: 0.86535734

00:12:50.220 --> 00:12:51.970 There are some absolutely wonderful

NOTE Confidence: 0.86535734

00:12:51.970 --> 00:12:53.179 medical reporters out there.

NOTE Confidence: 0.86535734

00:12:53.180 --> 00:12:54.520 So if you don't want to read the

00:12:56.850 --> 00:12:58.860 primary literature and

NOTE Confidence: 0.86535734

00:12:58.860 --> 00:13:01.198 pick up your copy of the New

NOTE Confidence: 0.86535734

00:13:01.198 --> 00:13:02.200 England Journal Medicine,

NOTE Confidence: 0.86535734

00:13:02.200 --> 00:13:03.865 there's some great science and

NOTE Confidence: 0.86535734

00:13:03.865 --> 00:13:05.197 medicine reporters out there.

NOTE Confidence: 0.86535734

00:13:05.200 --> 00:13:07.204 You want to look for reporters

NOTE Confidence: 0.86535734

00:13:07.204 --> 00:13:08.540 that that's their beat.

NOTE Confidence: 0.86535734

00:13:08.540 --> 00:13:10.876 Because of the slow death

NOTE Confidence: 0.86535734

00:13:10.876 --> 00:13:13.530 of the newspaper industry in America

NOTE Confidence: 0.86535734

00:13:13.530 --> 00:13:15.525 you get a lot of times the

NOTE Confidence: 0.86535734

00:13:15.525 --> 00:13:17.199 science and health, and

NOTE Confidence: 0.86535734

00:13:17.199 --> 00:13:18.564 even sports reporters are all

NOTE Confidence: 0.86535734

00:13:18.564 --> 00:13:20.367 the same person in some outlets.

NOTE Confidence: 0.86535734

00:13:20.370 --> 00:13:22.370 So you want to look for someone whose

NOTE Confidence: 0.86535734

00:13:22.370 --> 00:13:24.927 job is to write about health and medicine.

NOTE Confidence: 0.86535734

00:13:24.930 --> 00:13:26.640 They are often very well trained

NOTE Confidence: 0.86535734

00:13:26.640 --> 00:13:27.780 and are good nuanced

NOTE Confidence: 0.86535734

00:13:27.780 --> 00:13:29.490 and if you're

NOTE Confidence: 0.86535734

00:13:29.490 --> 00:13:30.920 reading about a new drug,

NOTE Confidence: 0.86535734

00:13:30.920 --> 00:13:32.705 a new treatment, you want to read

NOTE Confidence: 0.86535734

00:13:32.705 --> 00:13:34.618 from a couple of different people.

00:13:38.040 --> 00:13:39.180 There's some great writing,

NOTE Confidence: 0.86535734

00:13:39.180 --> 00:13:40.581 for example, in the Atlantic,

NOTE Confidence: 0.86535734

00:13:40.581 --> 00:13:42.520 the science section of the New York

NOTE Confidence: 0.86535734

00:13:42.583 --> 00:13:44.395 Times has always been very strong.

NOTE Confidence: 0.86535734

00:13:44.400 --> 00:13:47.392 Do they get it right 100% of the time?

NOTE Confidence: 0.86535734

00:13:47.392 --> 00:13:47.696 No,

NOTE Confidence: 0.86535734

00:13:47.696 --> 00:13:50.630 but that's why you look for other articles.

NOTE Confidence: 0.86535734

00:13:50.630 --> 00:13:51.617 That being said,

NOTE Confidence: 0.86535734

00:13:51.617 --> 00:13:53.920 it is not impossible for laypeople to

NOTE Confidence: 0.86535734

00:13:53.990 --> 00:13:56.510 go into the real medical literature and

NOTE Confidence: 0.86535734

00:13:56.510 --> 00:13:58.841 in fact I have a course

NOTE Confidence: 0.86535734

00:13:58.841 --> 00:14:00.320 online here at Yale,

NOTE Confidence: 0.86535734

00:14:00.320 --> 00:14:01.700 which is free called

NOTE Confidence: 0.86535734

00:14:01.700 --> 00:14:02.735 Understanding Medical Research:

NOTE Confidence: 0.86535734

00:14:02.740 --> 00:14:04.470 Your Facebook friend is wrong.

NOTE Confidence: 0.86535734

00:14:04.470 --> 00:14:06.504 It's on the Coursera platform you

NOTE Confidence: 0.86535734

00:14:06.504 --> 00:14:08.584 can search for it and basically

NOTE Confidence: 0.86535734

00:14:08.584 --> 00:14:10.866 it is an online course of 15

NOTE Confidence: 0.86535734

00:14:10.866 --> 00:14:13.106 minute lectures that you can watch

NOTE Confidence: 0.86535734

00:14:13.106 --> 00:14:14.582 over your lunch break

NOTE Confidence: 0.86535734

00:14:14.590 --> 00:14:16.782 where I teach you how to find a

NOTE Confidence: 0.86535734

00:14:16.782 --> 00:14:18.409 actual medical article,

NOTE Confidence: 0.86535734

00:14:18.410 --> 00:14:21.056 go to pub Med and how to find it,

NOTE Confidence: 0.86535734

00:14:21.060 --> 00:14:22.236 how to read it,

NOTE Confidence: 0.86535734

00:14:22.236 --> 00:14:24.000 and how to interpret the results.

NOTE Confidence: 0.86535734

00:14:24.000 --> 00:14:25.974 So if any of the listeners

NOTE Confidence: 0.86535734

00:14:25.974 --> 00:14:28.110 really want to get deep into this,

NOTE Confidence: 0.86535734

00:14:28.110 --> 00:14:30.049 really want to take that next step

NOTE Confidence: 0.86535734

00:14:30.049 --> 00:14:31.350 to understanding medical research.

NOTE Confidence: 0.86535734

00:14:31.350 --> 00:14:32.815 it's accessible you don't need

NOTE Confidence: 0.86535734

00:14:32.815 --> 00:14:33.987 a degree in chemistry.

NOTE Confidence: 0.86535734

00:14:33.990 --> 00:14:35.760 You don't need to remember calculus,

NOTE Confidence: 0.86535734

00:14:35.760 --> 00:14:37.818 you just need some logical thinking skills,

NOTE Confidence: 0.86535734

00:14:37.820 --> 00:14:40.164 and intuition so a little pitch for that course. It's free.

00:14:40.460 --> 00:14:42.490 And it's so

NOTE Confidence: 0.83808947

00:14:42.490 --> 00:14:43.989 important for people really to

NOTE Confidence: 0.83808947

00:14:43.990 --> 00:14:46.430 do your own research and be

NOTE Confidence: 0.83808947

00:14:46.430 --> 00:14:48.698 vigilant about it so that you're not

NOTE Confidence: 0.83808947

00:14:48.698 --> 00:14:50.398 taking other people's word for it.

NOTE Confidence: 0.83808947

00:14:50.400 --> 00:14:52.212 You're going to the source and

NOTE Confidence: 0.83808947

00:14:52.212 --> 00:14:53.750 knowing how to interpret that.

NOTE Confidence: 0.83808947

00:14:53.750 --> 00:14:55.472 We're going to take a short

NOTE Confidence: 0.83808947

00:14:55.472 --> 00:14:57.110 break for a medical minute,

NOTE Confidence: 0.83808947

00:14:57.110 --> 00:14:58.946 but please stay tuned to learn

NOTE Confidence: 0.83808947

00:14:58.946 --> 00:15:00.170 more about understanding medical

NOTE Confidence: 0.83808947

00:15:00.221 --> 00:15:01.676 research with my guest Doctor

NOTE Confidence: 0.83808947

00:15:01.680 --> 00:15:02.290 Perry Wilson.

NOTE Confidence: 0.83997893

00:15:02.890 --> 00:15:05.450 Support for Yale Cancer Answers

NOTE Confidence: 0.83997893

00:15:05.450 --> 00:15:08.502 comes from AstraZeneca, working to

NOTE Confidence: 0.83997893

00:15:08.502 --> 00:15:11.344 eliminate cancer as a cause of death.

NOTE Confidence: 0.83997893

00:15:11.350 --> 00:15:13.230 Learn more at astrazeneca-us.com.

NOTE Confidence: 0.88795465

00:15:15.280 --> 00:15:17.920 This is a medical minute about

NOTE Confidence: 0.88795465

00:15:17.920 --> 00:15:19.680 survivorship. Completing treatment for

NOTE Confidence: 0.88795465

00:15:19.749 --> 00:15:22.077 cancer is a very exciting milestone,

NOTE Confidence: 0.88795465

00:15:22.080 --> 00:15:25.329 but cancer and its treatment can be a life

NOTE Confidence: 0.88795465

00:15:25.329 --> 00:15:28.027 changing experience for cancer survivors.

NOTE Confidence: 0.88795465

00:15:28.030 --> 00:15:30.580 The return to normal activities and

NOTE Confidence: 0.88795465

00:15:30.580 --> 00:15:32.743 relationships can be difficult and

NOTE Confidence: 0.88795465

00:15:32.743 --> 00:15:35.101 some survivors face long term side

NOTE Confidence: 0.88795465

00:15:35.101 --> 00:15:37.380 effects resulting from their treatment,

NOTE Confidence: 0.88795465

00:15:37.380 --> 00:15:38.712 including heart problems,

NOTE Confidence: 0.88795465

00:15:38.712 --> 00:15:40.488 osteoporosis, fertility issues and

NOTE Confidence: 0.88795465

00:15:40.488 --> 00:15:42.910 an increased risk of second cancers.

NOTE Confidence: 0.88795465

00:15:42.910 --> 00:15:45.215 Resources are available to help

NOTE Confidence: 0.88795465

00:15:45.215 --> 00:15:47.059 keep cancer survivors well and

NOTE Confidence: 0.88795465

00:15:47.059 --> 00:15:48.810 focused on healthy living.

NOTE Confidence: 0.88795465

00:15:48.810 --> 00:15:50.894 More information is available

NOTE Confidence: 0.88795465

00:15:50.894 --> 00:15:51.936 at yalecancercenter.org.

NOTE Confidence: 0.88795465

00:15:51.940 --> 00:15:55.066 You're listening to Connecticut Public Radio.

NOTE Confidence: 0.8678523

00:15:56.450 --> 00:15:58.808 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.8678523

00:15:58.810 --> 00:16:00.966 This is doctor Anees Chagpar

NOTE Confidence: 0.8678523

00:16:00.966 --> 00:16:03.457 and I'm joined tonight by my guest

NOTE Confidence: 0.8678523

00:16:03.457 --> 00:16:05.707 doctor Perry Wilson and we're talking about

NOTE Confidence: 0.8678523

00:16:05.774 --> 00:16:07.850 understanding medical research.

NOTE Confidence: 0.8678523

00:16:07.850 --> 00:16:10.594 Perry, before the break

NOTE Confidence: 0.8678523

00:16:10.600 --> 00:16:13.365 we were talking about how much misinformation

NOTE Confidence: 0.8678523

00:16:13.365 --> 00:16:16.100 really is out there on the Internet,

NOTE Confidence: 0.8678523

00:16:16.100 --> 00:16:18.368 whether it's about covid or whether

NOTE Confidence: 0.8678523

00:16:18.368 --> 00:16:20.360 it's about cancer or whether

NOTE Confidence: 0.8678523

00:16:20.360 --> 00:16:22.385 it's about any topic really,

NOTE Confidence: 0.8678523

00:16:22.390 --> 00:16:24.350 whether it's medical or not.

NOTE Confidence: 0.8678523

00:16:24.350 --> 00:16:26.876 There is just so much misinformation

NOTE Confidence: 0.8678523

00:16:26.876 --> 00:16:28.560 that's propagated out there.

NOTE Confidence: 0.8678523

00:16:28.560 --> 00:16:31.768 So let's talk a little bit about some

NOTE Confidence: 0.8678523

00:16:31.768 --> 00:16:35.489 of the ways that we can mitigate that.

NOTE Confidence: 0.8678523

00:16:35.490 --> 00:16:38.088 You know, aside from being vigilant

NOTE Confidence: 0.8678523

00:16:38.090 --> 00:16:39.846 consumers of medical research,

NOTE Confidence: 0.8678523

00:16:39.846 --> 00:16:42.893 what else can be done to really

NOTE Confidence: 0.8678523

00:16:42.893 --> 00:16:45.836 kind of tamp down on all of the

NOTE Confidence: 0.8678523

00:16:45.922 --> 00:16:48.478 misinformation that's out there?

NOTE Confidence: 0.8192092

00:16:50.120 --> 00:16:52.857 This is a really hard problem

NOTE Confidence: 0.8192092

00:16:52.857 --> 00:16:56.266 that it's clear a lot of the social

NOTE Confidence: 0.8192092

00:16:56.266 --> 00:16:58.416 media companies are struggling with.

NOTE Confidence: 0.8192092

00:16:58.420 --> 00:17:01.740 As you know you see Facebook and Twitter

NOTE Confidence: 0.8192092

00:17:01.740 --> 00:17:03.400 for example, imposing essentially

NOTE Confidence: 0.8192092

00:17:03.400 --> 00:17:05.475 fact checking on some tweets,

NOTE Confidence: 0.8192092

00:17:05.480 --> 00:17:07.550 particularly surrounding hot button issues.

NOTE Confidence: 0.8192092

00:17:07.550 --> 00:17:09.625 For example, vaccination

NOTE Confidence: 0.8192092

00:17:09.625 --> 00:17:11.700 where they're literally

NOTE Confidence: 0.8192092

00:17:11.700 --> 00:17:14.052 blocking tweets, blocking posts that are

NOTE Confidence: 0.8192092

00:17:14.052 --> 00:17:16.561 construed by some of their

NOTE Confidence: 0.8192092

00:17:16.561 --> 00:17:19.165 moderators to be potentially anti VAX,

NOTE Confidence: 0.8192092

00:17:19.170 --> 00:17:20.172 for example this does

NOTE Confidence: 0.8192092

00:17:20.172 --> 00:17:21.842 strike some people as

NOTE Confidence: 0.8192092

00:17:21.842 --> 00:17:23.449 heavy handed.

NOTE Confidence: 0.8192092

00:17:23.450 --> 00:17:24.602 There are certainly concerns about

NOTE Confidence: 0.8192092

00:17:24.602 --> 00:17:26.780 is this going to have a chilling

NOTE Confidence: 0.8192092

00:17:26.780 --> 00:17:28.570 effect on speech?

NOTE Confidence: 0.8192092

00:17:28.570 --> 00:17:30.810 On the other side, people say that

NOTE Confidence: 0.8192092

00:17:30.810 --> 00:17:32.730 these are private companies that

NOTE Confidence: 0.8192092

00:17:32.730 --> 00:17:35.047 can do whatever they want

NOTE Confidence: 0.8192092

00:17:35.047 --> 00:17:36.889 within the confines of their own platform.

00:17:37.850 --> 00:17:39.130 It strikes me though,

NOTE Confidence: 0.8192092

00:17:39.130 --> 00:17:41.050 that it's a bit of whack-a-mole

NOTE Confidence: 0.8192092

00:17:41.050 --> 00:17:43.129 and that these efforts

NOTE Confidence: 0.8192092

00:17:43.129 --> 00:17:44.889 are reactive rather than proactive.

NOTE Confidence: 0.8192092

00:17:44.890 --> 00:17:48.090 What can we do to be more proactive?

NOTE Confidence: 0.8192092

00:17:48.090 --> 00:17:50.253 One of the things I've

NOTE Confidence: 0.8192092

00:17:50.253 --> 00:17:52.189 seen that's a little clever

NOTE Confidence: 0.8192092

00:17:52.190 --> 00:17:54.374 is Twitter has been generating a little

NOTE Confidence: 0.8192092

00:17:54.374 --> 00:17:56.780 pop up when you retweet an article

NOTE Confidence: 0.8192092

00:17:56.780 --> 00:17:58.880 if it notes that you haven't

NOTE Confidence: 0.8192092

00:17:58.880 --> 00:18:00.936 actually read the article.

00:18:04.656 --> 00:18:06.656 That's a whole other topic, right?

NOTE Confidence: 0.8192092

00:18:06.999 --> 00:18:08.714 Like how it knows

NOTE Confidence: 0.8192092

00:18:08.714 --> 00:18:10.375 whether you've opened the other

NOTE Confidence: 0.8192092

00:18:10.375 --> 00:18:12.199 you didn't look at the article,

NOTE Confidence: 0.8192092

00:18:12.200 --> 00:18:14.496 but I think what it's doing is

NOTE Confidence: 0.8192092

00:18:14.496 --> 00:18:16.458 the article will have a tweet with a link

00:18:20.716 --> 00:18:22.536 and it knows if you've clicked that

NOTE Confidence: 0.8192092

00:18:22.536 --> 00:18:24.728 link 'cause it's within Twitter.

NOTE Confidence: 0.8192092

00:18:24.730 --> 00:18:27.306 If you haven't and you click retweet,

NOTE Confidence: 0.8192092

00:18:27.310 --> 00:18:29.517 it's been saying, hey,

NOTE Confidence: 0.8192092

00:18:29.517 --> 00:18:32.086 do you want to maybe read this

NOTE Confidence: 0.8192092

00:18:32.086 --> 00:18:33.916 article before you retweet it?

00:18:34.628 --> 00:18:36.764 That is an interesting strategy because

NOTE Confidence: 0.8192092

00:18:36.764 --> 00:18:39.447 it takes the emotion slightly down.

NOTE Confidence: 0.8192092

00:18:39.450 --> 00:18:41.080 There's a tendency for people

NOTE Confidence: 0.8192092

00:18:41.080 --> 00:18:43.226 to share and retweet things that

NOTE Confidence: 0.8192092

00:18:43.226 --> 00:18:44.597 are emotionally activating.

NOTE Confidence: 0.8192092

00:18:44.600 --> 00:18:46.435 Whether they make you angry

NOTE Confidence: 0.8192092

00:18:46.435 --> 00:18:48.261 or make you happy.

NOTE Confidence: 0.8192092

00:18:48.261 --> 00:18:50.367 Whether it's a mama cat

NOTE Confidence: 0.8192092

00:18:50.367 --> 00:18:51.960 cuddling with baby kittens,

NOTE Confidence: 0.8192092

00:18:51.960 --> 00:18:54.697 or whether it's someone saying

NOTE Confidence: 0.8192092

00:18:54.697 --> 00:18:56.879 something terrible and caught on tape.

NOTE Confidence: 0.8192092

00:18:56.880 --> 00:18:58.505 Both of those strong reactions

NOTE Confidence: 0.8192092

00:18:58.505 --> 00:19:00.464 elicit a lot of engagement and

NOTE Confidence: 0.8192092

00:19:00.464 --> 00:19:02.403 trying to remove that a little bit,

NOTE Confidence: 0.8192092

00:19:02.410 --> 00:19:04.246 giving people a little extra time to say, wait

00:19:04.832 --> 00:19:07.630 do you really want to put this out there?

NOTE Confidence: 0.8192092

00:19:07.630 --> 00:19:09.466 Do you want to share this?

NOTE Confidence: 0.8192092

00:19:09.470 --> 00:19:11.000 Might help a little bit.

00:19:13.150 --> 00:19:15.299 My hope lies a lot with

NOTE Confidence: 0.8192092

00:19:15.299 --> 00:19:16.220 the younger generations.

NOTE Confidence: 0.8192092

00:19:16.220 --> 00:19:16.522 Honestly,

NOTE Confidence: 0.8192092

00:19:16.522 --> 00:19:18.334 who are growing up in this

NOTE Confidence: 0.8192092

00:19:18.334 --> 00:19:19.910 environment and in my opinion,

NOTE Confidence: 0.8192092

00:19:19.910 --> 00:19:22.045 are actually quite a bit more savvy.

00:19:22.670 --> 00:19:24.002 I agree with you.

NOTE Confidence: 0.8768185

00:19:24.002 --> 00:19:26.910 I think that even our patients who come in,

NOTE Confidence: 0.8768185

00:19:26.910 --> 00:19:30.046 many times the older

NOTE Confidence: 0.8768185

00:19:30.046 --> 00:19:32.367 generation sometimes will have heard

NOTE Confidence: 0.8768185

00:19:32.367 --> 00:19:35.352 things like sugar feeds cancer or

NOTE Confidence: 0.8768185

00:19:35.352 --> 00:19:39.250 it can stop all cancer and some of our

NOTE Confidence: 0.8768185

00:19:39.250 --> 00:19:41.890 younger patients or patients families,

NOTE Confidence: 0.8768185

00:19:41.890 --> 00:19:44.746 it's remarkable they will have gone

NOTE Confidence: 0.8768185

00:19:44.746 --> 00:19:47.660 to the literature and be quizzing

NOTE Confidence: 0.8768185

00:19:47.660 --> 00:19:50.873 you on the latest study that was

NOTE Confidence: 0.8768185

00:19:50.873 --> 00:19:53.464 published in the New England Journal

NOTE Confidence: 0.8768185

00:19:53.464 --> 00:19:56.362 or what just came out at ASCO.

NOTE Confidence: 0.8768185

00:19:56.362 --> 00:19:59.770 So it really does behoove us to

NOTE Confidence: 0.8768185

00:19:59.869 --> 00:20:03.040 be wary of what's out there now.

00:20:03.938 --> 00:20:06.183 Are there certain places where

NOTE Confidence: 0.8768185

00:20:06.183 --> 00:20:09.316 people should go to kind of look

NOTE Confidence: 0.8768185

00:20:09.316 --> 00:20:11.838 at the literature if they don't go

NOTE Confidence: 0.8768185

00:20:11.838 --> 00:20:14.428 to pubMed directly and again,

NOTE Confidence: 0.8768185

00:20:14.430 --> 00:20:17.302 your course will tell them how they can

NOTE Confidence: 0.8768185

00:20:17.302 --> 00:20:19.929 actually go to the primary literature,

NOTE Confidence: 0.8768185

00:20:19.930 --> 00:20:21.895 but are there certain websites

NOTE Confidence: 0.8768185

00:20:21.895 --> 00:20:24.256 that you think are

NOTE Confidence: 0.8768185

00:20:24.256 --> 00:20:26.614 generally pretty reliable versus

NOTE Confidence: 0.8768185

00:20:26.620 --> 00:20:29.170 kind of taking the latest weird

NOTE Confidence: 0.8768185

00:20:29.170 --> 00:20:31.935 theory that's out there?

NOTE Confidence: 0.7839545

00:20:31.940 --> 00:20:33.396 As I mentioned,

NOTE Confidence: 0.7839545

00:20:33.396 --> 00:20:35.580 some of the large news organizations

NOTE Confidence: 0.7839545

00:20:35.653 --> 00:20:37.365 that have dedicated science

NOTE Confidence: 0.7839545

00:20:37.365 --> 00:20:39.440 writers are a great tool,

NOTE Confidence: 0.7839545

00:20:39.440 --> 00:20:42.600 but if you really want dedicated sites,

NOTE Confidence: 0.7839545

00:20:42.600 --> 00:20:44.970 there's a couple of good sites,

NOTE Confidence: 0.7839545

00:20:44.970 --> 00:20:46.950 Medscape.com, andfFull disclosure,

NOTE Confidence: 0.7839545

00:20:46.950 --> 00:20:49.743 I have a weekly column on medscape.com

NOTE Confidence: 0.7839545

00:20:49.743 --> 00:20:52.866 but Medscape.com is a medical news website.

NOTE Confidence: 0.7839545

00:20:52.870 --> 00:20:55.252 It's an offshoot of WebMD which

NOTE Confidence: 0.7839545

00:20:55.252 --> 00:20:57.610 actually does a very nice job.

NOTE Confidence: 0.7839545

00:20:57.610 --> 00:20:59.670 They have dedicated reporters covering

NOTE Confidence: 0.7839545

00:20:59.670 --> 00:21:01.142 the latest medical studies,

NOTE Confidence: 0.7839545

00:21:01.142 --> 00:21:02.982 which is quite good, stat.com,

NOTE Confidence: 0.7839545

00:21:02.990 --> 00:21:05.312 which is another medical news focused

NOTE Confidence: 0.7839545

00:21:05.312 --> 00:21:07.790 website is quite good and

NOTE Confidence: 0.7839545

00:21:07.790 --> 00:21:10.094 as you're exploring there

NOTE Confidence: 0.7839545

00:21:10.094 --> 00:21:12.219 are other sites as well.

NOTE Confidence: 0.7839545

00:21:12.220 --> 00:21:15.164 And when you're exploring a site,

NOTE Confidence: 0.7839545

00:21:15.170 --> 00:21:18.005 I think one of the real hints as

NOTE Confidence: 0.7839545

00:21:18.005 --> 00:21:20.703 you're reading through as a reader to

NOTE Confidence: 0.7839545

00:21:20.703 --> 00:21:23.887 know about the quality here is

NOTE Confidence: 0.7839545

00:21:23.887 --> 00:21:26.996 look for emotion in the writing and if

NOTE Confidence: 0.7839545

00:21:26.996 --> 00:21:30.020 there is too much be worried.

NOTE Confidence: 0.7839545

00:21:30.020 --> 00:21:32.050 Real medical reading is often not

NOTE Confidence: 0.7839545

00:21:32.050 --> 00:21:33.674 the most exciting thing.

NOTE Confidence: 0.7839545

00:21:33.680 --> 00:21:35.260 This is not Hemingway.

NOTE Confidence: 0.7839545

00:21:35.260 --> 00:21:37.630 This is reporting on often nuanced

NOTE Confidence: 0.7839545

00:21:37.703 --> 00:21:40.199 medical studies and drugs that have

NOTE Confidence: 0.7839545

00:21:40.200 --> 00:21:43.035 some benefit but some risks.

NOTE Confidence: 0.7839545

00:21:43.040 --> 00:21:46.296 And if your reporting is expressive of that,

NOTE Confidence: 0.7839545

00:21:46.300 --> 00:21:49.170 then it's good reporting, latest

NOTE Confidence: 0.7839545

00:21:49.170 --> 00:21:51.589 breakthrough, Miracle Cure, New Silver Bullet.

NOTE Confidence: 0.7839545

00:21:51.590 --> 00:21:54.026 The end of blank diseases in sight.

NOTE Confidence: 0.7839545

00:21:54.030 --> 00:21:56.080 These highly emotional headlines are

NOTE Confidence: 0.7839545

00:21:56.080 --> 00:21:59.792 a good red flag that you're not on a

NOTE Confidence: 0.7839545

00:21:59.792 --> 00:22:02.168 site that's taking this very seriously.

NOTE Confidence: 0.87616915

00:22:02.390 --> 00:22:05.432 I mean it goes back to the old

NOTE Confidence: 0.87616915

00:22:05.432 --> 00:22:08.676 adage of if it sounds too good to be true,

NOTE Confidence: 0.87616915

00:22:08.680 --> 00:22:11.990 it likely is, and so I'll add to your list.

NOTE Confidence: 0.87616915

00:22:11.990 --> 00:22:15.158 I think that there are some

NOTE Confidence: 0.87616915

00:22:15.158 --> 00:22:16.452 good professional organizations

NOTE Confidence: 0.87616915

00:22:16.452 --> 00:22:19.026 that people can turn to.

NOTE Confidence: 0.87616915

00:22:19.030 --> 00:22:23.356 ASCO has some websites that are dedicated

NOTE Confidence: 0.87616915

00:22:23.356 --> 00:22:24.592 to patient information, cancer.net,

NOTE Confidence: 0.87616915

00:22:24.600 --> 00:22:28.320 for example, the American Cancer Society.

NOTE Confidence: 0.87616915

00:22:28.320 --> 00:22:31.405 Cancer.org has some great information

NOTE Confidence: 0.87616915

00:22:31.405 --> 00:22:35.813 and there are a variety of associations

NOTE Confidence: 0.87616915

00:22:35.813 --> 00:22:39.455 for whatever cancer my ail you,

NOTE Confidence: 0.87616915

00:22:39.460 --> 00:22:43.060 whether it's breast cancer or leukemia

NOTE Confidence: 0.87616915

00:22:43.060 --> 00:22:47.499 or colon and rectal cancer.

NOTE Confidence: 0.87616915

00:22:47.500 --> 00:22:48.859 Go to the

NOTE Confidence: 0.87616915

00:22:48.859 --> 00:22:50.671 organizations that are really

NOTE Confidence: 0.87616915

00:22:50.671 --> 00:22:52.879 doing the research into this,

NOTE Confidence: 0.87616915

00:22:52.880 --> 00:22:54.815 because very often they will

NOTE Confidence: 0.87616915

00:22:54.815 --> 00:22:57.558 publish that data and a good hint

NOTE Confidence: 0.87616915

00:22:57.558 --> 00:22:59.736 is to look for the footnotes,

NOTE Confidence: 0.87616915

00:22:59.740 --> 00:23:02.379 because very often they will lead you

NOTE Confidence: 0.87616915

00:23:02.379 --> 00:23:05.183 to the studies and to the literature

NOTE Confidence: 0.87616915

00:23:05.183 --> 00:23:07.577 that they're citing in making the

NOTE Confidence: 0.87616915

00:23:07.652 --> 00:23:10.404 claim that they they have so and so.

NOTE Confidence: 0.87616915

00:23:10.410 --> 00:23:13.839 We have some of that data for

NOTE Confidence: 0.87616915

00:23:13.839 --> 00:23:16.500 cancer, and I think that

NOTE Confidence: 0.87616915

00:23:16.500 --> 00:23:18.660 because cancer has been around

NOTE Confidence: 0.87616915

00:23:18.660 --> 00:23:20.388 for a long time,

NOTE Confidence: 0.87616915

00:23:20.390 --> 00:23:23.630 a lot of the misinformation now I think it's

NOTE Confidence: 0.87616915

00:23:23.630 --> 00:23:26.341 starting to die down. There still are some

NOTE Confidence: 0.87616915

00:23:26.341 --> 00:23:29.019 old wives tales out there like

NOTE Confidence: 0.87616915

00:23:29.020 --> 00:23:31.090 sugar feeds cancer or tumeric

NOTE Confidence: 0.87616915

00:23:31.090 --> 00:23:32.810 will cure all cancers.

NOTE Confidence: 0.87616915

00:23:32.810 --> 00:23:34.750 PS for our listeners,

NOTE Confidence: 0.87616915

00:23:34.750 --> 00:23:38.180 neither of those two statements are true.

NOTE Confidence: 0.87616915

00:23:38.180 --> 00:23:39.828 But for novel diseases,

NOTE Confidence: 0.87616915

00:23:39.828 --> 00:23:42.722 things like Covid, it's a lot harder.

NOTE Confidence: 0.87616915

00:23:42.722 --> 00:23:44.374 I think for people,

NOTE Confidence: 0.87616915

00:23:44.380 --> 00:23:46.028 especially initially to weed

NOTE Confidence: 0.87616915

00:23:46.028 --> 00:23:48.088 out some of that misinformation.

NOTE Confidence: 0.87616915

00:23:48.090 --> 00:23:50.974 So what are some of the misinformation

NOTE Confidence: 0.87616915

00:23:50.980 --> 00:23:53.212 hot buttons that you found

NOTE Confidence: 0.87616915

00:23:53.212 --> 00:23:55.247 out there that are propagated

NOTE Confidence: 0.87616915

00:23:55.247 --> 00:23:57.587 that you'd like to dispel?

NOTE Confidence: 0.87616915

00:23:57.590 --> 00:23:58.420 Oh my

NOTE Confidence: 0.8453109

00:23:58.420 --> 00:24:00.742 gosh, Covid has really given

NOTE Confidence: 0.8453109

00:24:00.742 --> 00:24:03.679 those of us who like to correct

NOTE Confidence: 0.8453109

00:24:03.679 --> 00:24:05.849 the record in Medicine a lot to do.

NOTE Confidence: 0.8453109

00:24:05.850 --> 00:24:08.410 It's been a full time job in Covid

NOTE Confidence: 0.8453109

00:24:08.410 --> 00:24:11.482 and I think in part it gets back to

NOTE Confidence: 0.8453109

00:24:11.482 --> 00:24:14.170 that idea of motivated reasoning.

NOTE Confidence: 0.8453109

00:24:14.170 --> 00:24:15.930 We all hate this pandemic.

NOTE Confidence: 0.8453109

00:24:15.930 --> 00:24:18.204 Every single one of us wants

NOTE Confidence: 0.8453109

00:24:18.204 --> 00:24:20.858 nothing more than for it to be over,

NOTE Confidence: 0.8453109

00:24:20.860 --> 00:24:23.149 and if there were some simple cure

NOTE Confidence: 0.8453109

00:24:23.149 --> 00:24:25.363 that was cheap and effective and

NOTE Confidence: 0.8453109

00:24:25.363 --> 00:24:27.544 worked 100% of the time oh my gosh,

NOTE Confidence: 0.8453109

00:24:27.544 --> 00:24:28.948 it would be amazing.

NOTE Confidence: 0.8453109

00:24:28.950 --> 00:24:31.442 We all want that and so you

NOTE Confidence: 0.8453109

00:24:31.442 --> 00:24:33.259 had this proliferation of data

NOTE Confidence: 0.8453109

00:24:33.259 --> 00:24:34.939 coming out early in Covid

NOTE Confidence: 0.8453109

00:24:34.940 --> 00:24:37.397 and I think that's sort of prototypical.

NOTE Confidence: 0.8453109

00:24:37.400 --> 00:24:39.205 One was the study surrounding

NOTE Confidence: 0.8453109

00:24:39.205 --> 00:24:39.927 Hydroxychloroquine which

NOTE Confidence: 0.8453109

00:24:39.930 --> 00:24:41.380 is an anti-malarial drug

NOTE Confidence: 0.8453109

00:24:41.380 --> 00:24:42.830 that's also used for lupus,

NOTE Confidence: 0.8453109

00:24:42.830 --> 00:24:44.280 which is an autoimmune disease.

NOTE Confidence: 0.8453109

00:24:44.280 --> 00:24:46.536 An old drug that with a lot of

NOTE Confidence: 0.8453109

00:24:46.536 --> 00:24:48.603 experience with and the truth is

NOTE Confidence: 0.8453109

00:24:48.603 --> 00:24:50.660 relatively safe as some drugs go,

NOTE Confidence: 0.8453109

00:24:50.660 --> 00:24:52.823 although there can be risks of cardiac

NOTE Confidence: 0.8453109

00:24:52.823 --> 00:24:54.428 arrhythmias in people who take it,

NOTE Confidence: 0.8453109

00:24:54.430 --> 00:24:55.300 but it's not

00:24:55.880 --> 00:24:58.490 the most toxic drug in the world,

NOTE Confidence: 0.8453109

00:24:58.490 --> 00:25:00.230 and some early studies,

NOTE Confidence: 0.8453109

00:25:00.230 --> 00:25:01.665 10-20 people suggested that maybe

NOTE Confidence: 0.8453109

00:25:01.665 --> 00:25:03.709 they get a little better faster now.

NOTE Confidence: 0.8453109

00:25:03.710 --> 00:25:05.942 Skip ahead and I'll tell you that large

NOTE Confidence: 0.8453109

00:25:05.942 --> 00:25:07.768 clinical trials have been done

NOTE Confidence: 0.8453109

00:25:07.770 --> 00:25:09.822 now I think we're at 9 or 10 large

NOTE Confidence: 0.8453109

00:25:09.822 --> 00:25:11.648 clinical trials of hydroxychloroquine.

NOTE Confidence: 0.8453109

00:25:11.650 --> 00:25:13.162 All of them negative.

NOTE Confidence: 0.8453109

00:25:14.676 --> 00:25:16.188 That's fairly well confirmed,

NOTE Confidence: 0.8453109

00:25:16.190 --> 00:25:18.075 but initially there was this

NOTE Confidence: 0.8453109

00:25:18.075 --> 00:25:19.583 huge enthusiasm surrounding it.

NOTE Confidence: 0.8453109

00:25:19.590 --> 00:25:22.250 And to the point where you know

NOTE Confidence: 0.8453109

00:25:22.250 --> 00:25:23.827 people were stockpiling the

NOTE Confidence: 0.8453109

00:25:23.827 --> 00:25:25.637 stuff people were taking it,

NOTE Confidence: 0.8453109

00:25:25.640 --> 00:25:29.420 and I think it fed what we wanted to believe,

NOTE Confidence: 0.8453109

00:25:29.420 --> 00:25:32.059 which was that there was a solution.

NOTE Confidence: 0.8453109

00:25:32.060 --> 00:25:35.030 And unfortunately the truth

NOTE Confidence: 0.8453109

00:25:35.030 --> 00:25:37.305 it's rare that things work that well.

NOTE Confidence: 0.8453109

00:25:37.310 --> 00:25:38.920 It's just unlikely that no

NOTE Confidence: 0.8453109

00:25:38.920 --> 00:25:40.900 matter what comes down the pipe,

NOTE Confidence: 0.8453109

00:25:40.900 --> 00:25:42.937 the cure is going to be something

NOTE Confidence: 0.8453109

00:25:42.937 --> 00:25:44.606 in your medicine cabinet that

NOTE Confidence: 0.8453109

00:25:44.606 --> 00:25:46.436 just doesn't happen very often.

00:25:46.766 --> 00:25:48.070 The exception being maybe

NOTE Confidence: 0.8453109

00:25:48.070 --> 00:25:49.700 like scurvy and vitamin C,

NOTE Confidence: 0.8453109

00:25:49.700 --> 00:25:52.059 and even that took a randomized trial

NOTE Confidence: 0.8453109

00:25:52.059 --> 00:25:54.586 to figure out back on the high seas.

NOTE Confidence: 0.8453109

00:25:54.590 --> 00:25:57.198 So that was certainly a big one.

00:25:58.830 --> 00:25:59.817 What's more concerning,

NOTE Confidence: 0.8453109

00:25:59.817 --> 00:26:02.120 I think even then the medication stuff

NOTE Confidence: 0.8453109

00:26:02.179 --> 00:26:04.039 is the vaccination issues in covid,

NOTE Confidence: 0.8453109

00:26:04.040 --> 00:26:05.730 so these are new vaccines.

NOTE Confidence: 0.8453109

00:26:05.730 --> 00:26:08.047 A lot of vaccine hesitancy at baseline

NOTE Confidence: 0.8453109

00:26:08.047 --> 00:26:10.357 kind of brought up to a degree by

NOTE Confidence: 0.8453109

00:26:10.357 --> 00:26:12.493 the fact that there are some new

NOTE Confidence: 0.8453109

00:26:12.493 --> 00:26:14.125 technologies in these vaccines,

NOTE Confidence: 0.8453109

00:26:14.130 --> 00:26:15.422 like MRNA technology,

NOTE Confidence: 0.8453109

00:26:15.422 --> 00:26:17.037 which I will point out,

NOTE Confidence: 0.8453109

00:26:17.040 --> 00:26:19.184 is new in the sense that we've never

NOTE Confidence: 0.8453109

00:26:19.184 --> 00:26:21.557 done it broadscale treatment with it,

NOTE Confidence: 0.8453109

00:26:21.560 --> 00:26:22.884 but is not new.

NOTE Confidence: 0.8453109

00:26:22.884 --> 00:26:24.539 It's actually been in clinical

NOTE Confidence: 0.8453109

00:26:24.539 --> 00:26:26.728 use for more than a decade now,

NOTE Confidence: 0.8453109

00:26:26.730 --> 00:26:28.656 but still new stuff for people,

NOTE Confidence: 0.8453109

00:26:28.660 --> 00:26:30.928 and we're seeing a lot of misinformation

NOTE Confidence: 0.8453109

00:26:30.928 --> 00:26:32.860 about what is in the vaccine,

NOTE Confidence: 0.8453109

00:26:32.860 --> 00:26:34.480 how the trials were done.

NOTE Confidence: 0.8453109

00:26:34.480 --> 00:26:36.818 I was reading on social media that

NOTE Confidence: 0.8453109

00:26:36.820 --> 00:26:39.118 people were saying that the trials

NOTE Confidence: 0.8453109

00:26:39.118 --> 00:26:41.029 were inoculating their volunteers with

NOTE Confidence: 0.8453109

00:26:41.029 --> 00:26:43.248 Covid when they walked through the door,

NOTE Confidence: 0.8453109

00:26:43.250 --> 00:26:45.422 which is a trial design

NOTE Confidence: 0.8453109

00:26:45.422 --> 00:26:46.870 that is quite controversial

NOTE Confidence: 0.8467968

00:26:46.941 --> 00:26:49.076 and is not what happened in these

NOTE Confidence: 0.8467968

00:26:49.076 --> 00:26:51.458 large clinical trials.

NOTE Confidence: 0.8467968

00:26:51.460 --> 00:26:54.001 And the problem of course with this

NOTE Confidence: 0.8467968

00:26:54.001 --> 00:26:56.531 misinformation is that this really does hurt

NOTE Confidence: 0.8467968

00:26:56.531 --> 00:26:58.956 our ability to end this pandemic, because

NOTE Confidence: 0.8467968

00:26:58.956 --> 00:27:01.804 the vaccines are the best tools we have.

00:27:03.950 --> 00:27:05.378 There's lots of misinformation

NOTE Confidence: 0.8467968

00:27:05.378 --> 00:27:07.242 around masks as well.

NOTE Confidence: 0.8467968

00:27:07.242 --> 00:27:09.406 You still see posts saying that

NOTE Confidence: 0.8467968

00:27:09.406 --> 00:27:11.134 masks reduce your blood oxygen content

NOTE Confidence: 0.8467968

00:27:11.134 --> 00:27:12.988 or increase the carbon dioxide content.

NOTE Confidence: 0.8467968

00:27:12.990 --> 00:27:13.878 You're a surgeon.

NOTE Confidence: 0.8467968

00:27:13.878 --> 00:27:15.358 My wife is a surgeon.

NOTE Confidence: 0.8467968

00:27:15.360 --> 00:27:17.028 She is wearing a mask for

NOTE Confidence: 0.8467968

00:27:17.028 --> 00:27:18.930 8 hours a day, every day,

NOTE Confidence: 0.8467968

00:27:18.930 --> 00:27:21.009 and her oxygen level is perfectly fine.

NOTE Confidence: 0.8467968

00:27:21.010 --> 00:27:22.756 She doesn't get lung disease or

NOTE Confidence: 0.8467968

00:27:22.756 --> 00:27:24.270 infections that's still out there,

NOTE Confidence: 0.8467968

00:27:24.270 --> 00:27:25.390 and it really does

NOTE Confidence: 0.8467968

00:27:25.390 --> 00:27:26.790 hurt our ability

NOTE Confidence: 0.8467968

00:27:26.790 --> 00:27:28.429 to end the pandemic faster.

NOTE Confidence: 0.8467968

00:27:28.430 --> 00:27:29.875 We're kind of shooting ourselves

NOTE Confidence: 0.8467968

00:27:29.875 --> 00:27:31.700 in the foot with this stuff.

00:27:32.290 --> 00:27:33.775 The other big

NOTE Confidence: 0.85245615

00:27:33.775 --> 00:27:34.963 piece of misinformation, I

NOTE Confidence: 0.85245615

00:27:34.970 --> 00:27:36.986 was watching the news the other

NOTE Confidence: 0.85245615

00:27:36.986 --> 00:27:38.980 day and they were saying that

NOTE Confidence: 0.85245615

00:27:38.980 --> 00:27:42.055 33% of Americans that

NOTE Confidence: 0.85245615

00:27:42.055 --> 00:27:45.815 were surveyed in this one poll

NOTE Confidence: 0.85245615

00:27:45.815 --> 00:27:49.199 felt that Covid was not real.

NOTE Confidence: 0.85245615

00:27:49.200 --> 00:27:51.288 And you kind of shake your head and

NOTE Confidence: 0.85245615

00:27:51.288 --> 00:27:53.665 you say we're now over half a million

NOTE Confidence: 0.85245615

00:27:53.665 --> 00:27:55.795 people dead in this country of a

NOTE Confidence: 0.85245615

00:27:55.795 --> 00:27:57.839 disease that you think is not real.

00:28:01.050 --> 00:28:02.146 And for people, including myself,

NOTE Confidence: 0.8419431

00:28:02.146 --> 00:28:04.718 and I'm sure you as well have cared for

NOTE Confidence: 0.8419431

00:28:04.718 --> 00:28:06.458 these patients in the hospital that

NOTE Confidence: 0.8419431

00:28:06.458 --> 00:28:08.600 it's particularly painful to hear that.

NOTE Confidence: 0.8419431

00:28:08.600 --> 00:28:10.637 And of course, some of us have

NOTE Confidence: 0.8419431

00:28:10.637 --> 00:28:12.530 lost loved ones to the disease.

NOTE Confidence: 0.8419431

00:28:12.530 --> 00:28:14.336 But you know, again

NOTE Confidence: 0.8419431

00:28:14.340 --> 00:28:16.370 I'm trying to do my best to

NOTE Confidence: 0.8419431

00:28:16.370 --> 00:28:17.959 understand where this comes from,

NOTE Confidence: 0.8419431

00:28:17.960 --> 00:28:19.622 and I do think it comes

NOTE Confidence: 0.8419431

00:28:19.622 --> 00:28:21.589 from a place of desire.

NOTE Confidence: 0.8419431

00:28:21.590 --> 00:28:23.998 Why do people believe that it's not real?

NOTE Confidence: 0.8419431

00:28:24.000 --> 00:28:26.416 Because they don't want it to be real,

NOTE Confidence: 0.8419431

00:28:26.420 --> 00:28:28.226 and if we just ask people,

NOTE Confidence: 0.8419431

00:28:28.230 --> 00:28:29.880 be aware of your motivations

NOTE Confidence: 0.8419431

00:28:29.880 --> 00:28:32.632 and be skeptical of data that only

NOTE Confidence: 0.8419431

00:28:32.632 --> 00:28:34.740 confirms what you want to be true,

NOTE Confidence: 0.8419431

00:28:34.740 --> 00:28:36.360 people will be in good shape.

NOTE Confidence: 0.8768502

00:28:37.000 --> 00:28:39.232 Doctor Perry Wilson is the course

NOTE Confidence: 0.8768502

00:28:39.232 --> 00:28:41.488 director of Interpretation of the medical

NOTE Confidence: 0.8768502

00:28:41.488 --> 00:28:43.966 literature at the Yale School of Medicine.

NOTE Confidence: 0.8768502

00:28:43.970 --> 00:28:45.442 If you have questions,

NOTE Confidence: 0.8768502

00:28:45.442 --> 00:28:46.914 the address is canceranswers@yale.edu

NOTE Confidence: 0.8768502

00:28:46.914 --> 00:28:48.945 and past editions of the program

NOTE Confidence: 0.8768502

00:28:48.945 --> 00:28:50.799 are available in audio and written

NOTE Confidence: 0.8768502

00:28:50.861 --> 00:28:52.409 form at yalecancercenter.org.

NOTE Confidence: 0.8768502

00:28:52.410 --> 00:28:54.946 We hope you'll join us next week to

NOTE Confidence: 0.8768502

00:28:54.946 --> 00:28:57.418 learn more about the fight against

NOTE Confidence: 0.8768502

00:28:57.418 --> 00:29:00.064 cancer here on Connecticut Public Radio.