## WEBVTT

NOTE duration: "00:57:07.8720000"

NOTE language:en-us

NOTE Confidence: 0.82285076379776

 $00:00:00.000 \longrightarrow 00:00:02.768$  18 and a half us considered to be

NOTE Confidence: 0.82285076379776

 $00:00:02.768 \longrightarrow 00:00:04.639$  within normal weight status when

NOTE Confidence: 0.82285076379776

 $00:00:04.639 \longrightarrow 00:00:07.660$  their BMI is between 18 1/2 and 24.9,

NOTE Confidence: 0.82285076379776

 $00:00:07.660 \longrightarrow 00:00:10.285$  we get into a person having overweight

NOTE Confidence: 0.82285076379776

00:00:10.285 --> 00:00:13.107 when their BMI is between 25 and 29.9,

NOTE Confidence: 0.82285076379776

 $00:00:13.110 \longrightarrow 00:00:15.288$  and then we get into those

NOTE Confidence: 0.82285076379776

 $00{:}00{:}15.288 \dashrightarrow 00{:}00{:}17.102$  three classes of obesity, mild,

NOTE Confidence: 0.82285076379776

00:00:17.102 --> 00:00:18.550 moderate or severe class,

NOTE Confidence: 0.82285076379776

 $00{:}00{:}18.550 \dashrightarrow 00{:}00{:}20.974$  one Class 2 and Class 3A BMI of

NOTE Confidence: 0.82285076379776

00:00:20.974 --> 00:00:23.638 30 to 34.9 being mild obesity,

NOTE Confidence: 0.82285076379776

 $00{:}00{:}23.640 --> 00{:}00{:}25.873$  BMI of 35 to 39.9 being moderate

NOTE Confidence: 0.82285076379776

 $00{:}00{:}25.873 \dashrightarrow 00{:}00{:}28.148$  obesity and those that have severe

NOTE Confidence: 0.82285076379776

 $00:00:28.148 \longrightarrow 00:00:30.223$  remember not morbid severe obesity.

NOTE Confidence: 0.82285076379776

 $00:00:30.230 \longrightarrow 00:00:32.885$  A BMI of greater than or equal to 40.

 $00:00:32.890 \longrightarrow 00:00:34.818$  Now this is when we're going to really

NOTE Confidence: 0.82285076379776

 $00:00:34.818 \longrightarrow 00:00:37.019$  get down and dirty and looking at

NOTE Confidence: 0.82285076379776

 $00:00:37.019 \longrightarrow 00:00:38.684$  obesity because unfortunately in medical

NOTE Confidence: 0.82285076379776

 $00:00:38.742 \longrightarrow 00:00:40.252$  school and residency and fellowship

NOTE Confidence: 0.82285076379776

 $00:00:40.252 \longrightarrow 00:00:42.604$  we were not taught very much about obesity.

NOTE Confidence: 0.82285076379776

 $00:00:42.604 \longrightarrow 00:00:45.539$  But what we were taught was that it was just

NOTE Confidence: 0.82285076379776

 $00:00:45.539 \longrightarrow 00:00:47.393$  a simple simple energy balance equation.

NOTE Confidence: 0.82285076379776

 $00{:}00{:}47.400 \dashrightarrow 00{:}00{:}49.297$  It's all about your calories you take

NOTE Confidence: 0.82285076379776

00:00:49.297 --> 00:00:51.248 in your food and beverage intake,

NOTE Confidence: 0.82285076379776

 $00:00:51.250 \longrightarrow 00:00:53.026$  and then the calories you put

NOTE Confidence: 0.82285076379776

00:00:53.026 --> 00:00:54.210 out your bodily functions,

NOTE Confidence: 0.82285076379776

 $00:00:54.210 \longrightarrow 00:00:56.522$  your physical activity and if we could just

NOTE Confidence: 0.82285076379776

 $00{:}00{:}56.522 \dashrightarrow 00{:}00{:}58.935$  get this all balanced just the right way.

NOTE Confidence: 0.82285076379776

 $00:00:58.940 \longrightarrow 00:01:01.112$  We all should be just exactly

NOTE Confidence: 0.82285076379776

 $00:01:01.112 \longrightarrow 00:01:03.510$  the size that we want to be.

 $00:01:03.510 \longrightarrow 00:01:05.393$  But what we do know is that

NOTE Confidence: 0.82285076379776

 $00{:}01{:}05.393 \dashrightarrow 00{:}01{:}06.910$  this is indeed a fallacy.

NOTE Confidence: 0.82285076379776

 $00:01:06.910 \longrightarrow 00:01:07.738$  This is false,

NOTE Confidence: 0.82285076379776

00:01:07.738 --> 00:01:10.299 and if we continue to support this notion of,

NOTE Confidence: 0.82285076379776

 $00:01:10.300 \longrightarrow 00:01:11.998$  this is how energy balance works.

NOTE Confidence: 0.82285076379776

00:01:12.000 --> 00:01:13.104 Will continue to fill.

NOTE Confidence: 0.82285076379776

 $00:01:13.104 \longrightarrow 00:01:15.380$  Our patients will continue to fill to make

NOTE Confidence: 0.82285076379776

 $00:01:15.380 \longrightarrow 00:01:17.084$  any progress with this disease process.

NOTE Confidence: 0.82285076379776

 $00{:}01{:}17.090 \dashrightarrow 00{:}01{:}19.162$  So we'll learn about this disease process

NOTE Confidence: 0.82285076379776

 $00:01:19.162 \longrightarrow 00:01:21.616$  and want to tell you where to start it.

NOTE Confidence: 0.82285076379776

 $00:01:21.620 \longrightarrow 00:01:22.442$  Very elementary level.

NOTE Confidence: 0.82285076379776

 $00:01:22.442 \longrightarrow 00:01:24.360$  We're going to work our way up

NOTE Confidence: 0.82285076379776

 $00:01:24.414 \longrightarrow 00:01:26.297$  to very PhD level in terms of

NOTE Confidence: 0.82285076379776

 $00{:}01{:}26.297 \dashrightarrow 00{:}01{:}27.570$  thinking about obesity disease.

NOTE Confidence: 0.82285076379776

00:01:27.570 --> 00:01:28.341 But don't worry,

NOTE Confidence: 0.82285076379776

00:01:28.341 --> 00:01:30.140 I'll bring it back down to 8th

 $00:01:30.204 \longrightarrow 00:01:32.010$  grade before looking at what we

NOTE Confidence: 0.82285076379776

 $00{:}01{:}32.010 \dashrightarrow 00{:}01{:}33.770$  do individually for our patients.

NOTE Confidence: 0.82285076379776

 $00:01:33.770 \longrightarrow 00:01:35.540$  So here we are in Kindergarten

NOTE Confidence: 0.82285076379776

 $00:01:35.540 \longrightarrow 00:01:36.720$  School is in session,

NOTE Confidence: 0.82285076379776

 $00{:}01{:}36.720 \dashrightarrow 00{:}01{:}38.904$  so on this left side of the screen

NOTE Confidence: 0.82285076379776

 $00:01:38.904 \longrightarrow 00:01:41.043$  you can see this slice of pepperoni

NOTE Confidence: 0.82285076379776

00:01:41.043 --> 00:01:43.518 pizza OK and on the right side of

NOTE Confidence: 0.82285076379776

 $00{:}01{:}43.518 \dashrightarrow 00{:}01{:}45.562$  the screen we can see this much

NOTE Confidence: 0.82285076379776

 $00{:}01{:}45.570 \dashrightarrow 00{:}01{:}47.050$  larger dental plate of quinoa.

NOTE Confidence: 0.82285076379776

00:01:47.050 --> 00:01:48.226 Chickpeas roasted red Peppers,

NOTE Confidence: 0.82285076379776 00:01:48.226 --> 00:01:48.520 carrots, NOTE Confidence: 0.82285076379776 00:01:48.520 --> 00:01:48.802 tabouli,

NOTE Confidence: 0.82285076379776

 $00:01:48.802 \longrightarrow 00:01:50.212$  accelerate cetera and notice that

NOTE Confidence: 0.82285076379776

 $00{:}01{:}50.212 \dashrightarrow 00{:}01{:}52.310$  the title of the slide says all

NOTE Confidence: 0.82285076379776

 $00{:}01{:}52.310 \dashrightarrow 00{:}01{:}53.538$  calories aren't created equal.

 $00:01:53.540 \longrightarrow 00:01:55.860$  So I can tell you that every new

NOTE Confidence: 0.82285076379776

 $00{:}01{:}55.860 \dashrightarrow 00{:}01{:}57.866$  patient visit I start off with this

NOTE Confidence: 0.82285076379776

 $00:01:57.866 \longrightarrow 00:02:00.219$  slide set and I asked them we have

NOTE Confidence: 0.82285076379776

00:02:00.219 --> 00:02:02.073 this slice of pepperoni pizza on

NOTE Confidence: 0.82285076379776

 $00:02:02.073 \longrightarrow 00:02:04.189$  the left side of the screen on the

NOTE Confidence: 0.82285076379776

 $00:02:04.189 \longrightarrow 00:02:06.000$  order of about 350 kilocalories.

NOTE Confidence: 0.82285076379776

 $00:02:06.000 \longrightarrow 00:02:08.064$  And on the right side of the screen,

NOTE Confidence: 0.82285076379776

00:02:08.070 --> 00:02:10.146 what we talked about a much, you know,

NOTE Confidence: 0.82285076379776

 $00{:}02{:}10.146 \dashrightarrow 00{:}02{:}11.436$  maybe healthier set of foods,

NOTE Confidence: 0.82285076379776

 $00:02:11.440 \longrightarrow 00:02:12.220$  about 700 calories.

NOTE Confidence: 0.82285076379776

 $00{:}02{:}12.220 \dashrightarrow 00{:}02{:}13.780$  I asked my patients which one

NOTE Confidence: 0.82285076379776

00:02:13.780 --> 00:02:15.589 would you eat and most people will

NOTE Confidence: 0.82285076379776

 $00:02:15.589 \longrightarrow 00:02:16.880$  correctly pick the right side.

NOTE Confidence: 0.82285076379776

00:02:16.880 --> 00:02:17.912 And then I say,

NOTE Confidence: 0.82285076379776 00:02:17.912 --> 00:02:18.170 well, NOTE Confidence: 0.82285076379776

 $00:02:18.170 \longrightarrow 00:02:19.703$  what about the fact that I told

 $00:02:19.703 \longrightarrow 00:02:21.605$  you it was about double the amount

NOTE Confidence: 0.82285076379776

 $00:02:21.605 \longrightarrow 00:02:23.085$  of calories in every level?

NOTE Confidence: 0.82285076379776

 $00{:}02{:}23.090 \dashrightarrow 00{:}02{:}24.910$  This this one is healthier and I

NOTE Confidence: 0.82285076379776

 $00:02:24.910 \longrightarrow 00:02:26.821$  asked him to explain why I think

NOTE Confidence: 0.82285076379776

 $00:02:26.821 \longrightarrow 00:02:28.957$  we can all agree that this is a

NOTE Confidence: 0.82285076379776

 $00:02:28.957 \longrightarrow 00:02:30.853$  healthier fear and so I can tell you

NOTE Confidence: 0.865599513053894

 $00:02:30.860 \longrightarrow 00:02:32.180$  that with none of my patients

NOTE Confidence: 0.865599513053894

 $00{:}02{:}32.180 \dashrightarrow 00{:}02{:}34.021$  do I ever ask them about the

NOTE Confidence: 0.865599513053894

 $00:02:34.021 \longrightarrow 00:02:35.526$  number of calories there eating.

NOTE Confidence: 0.865599513053894

 $00:02:35.530 \longrightarrow 00:02:37.448$  What matters is whether they are processed.

NOTE Confidence: 0.865599513053894

 $00:02:37.450 \longrightarrow 00:02:40.066$  Or not, there was a lovely study that

NOTE Confidence: 0.865599513053894

 $00:02:40.066 \longrightarrow 00:02:42.906$  was run by Kevin Hall out of the NIH,

NOTE Confidence: 0.865599513053894

 $00:02:42.910 \longrightarrow 00:02:45.017$  where he looked at Adlib thieves and

NOTE Confidence: 0.865599513053894

 $00{:}02{:}45.017 \dashrightarrow 00{:}02{:}47.011$  an adult humans and determined what

NOTE Confidence: 0.865599513053894

00:02:47.011 --> 00:02:49.063 happened to ones weight status with

00:02:49.063 --> 00:02:51.000 the use of idle process consumption

NOTE Confidence: 0.865599513053894

 $00{:}02{:}51.000 \dashrightarrow 00{:}02{:}52.826$  of food versus a more virtuous

NOTE Confidence: 0.865599513053894

 $00:02:52.826 \longrightarrow 00:02:54.828$  fair like you see on the right

NOTE Confidence: 0.865599513053894

 $00:02:54.828 \longrightarrow 00:02:57.255$  side of the screen and what he saw

NOTE Confidence: 0.865599513053894

 $00:02:57.255 \longrightarrow 00:02:59.283$  overtime was that even though Clore

NOTE Confidence: 0.865599513053894

 $00:02:59.283 \longrightarrow 00:03:01.198$  consumption was about the same,

NOTE Confidence: 0.865599513053894

 $00:03:01.200 \longrightarrow 00:03:03.720$  the weight tended to go down and individuals

NOTE Confidence: 0.865599513053894

 $00:03:03.720 \longrightarrow 00:03:06.018$  that ate this fear compared to this,

NOTE Confidence: 0.865599513053894

 $00:03:06.020 \longrightarrow 00:03:07.645$  even though the chloric value

NOTE Confidence: 0.865599513053894

 $00:03:07.645 \longrightarrow 00:03:08.620$  was almost identical.

NOTE Confidence: 0.865599513053894

 $00:03:08.620 \longrightarrow 00:03:11.700$  So that's important for us to recognize.

NOTE Confidence: 0.865599513053894

 $00:03:11.700 \longrightarrow 00:03:14.588$  So we do know that obesity is a

NOTE Confidence: 0.865599513053894

 $00:03:14.588 \longrightarrow 00:03:16.359$  multifactorial disorder where genetics,

NOTE Confidence: 0.865599513053894

 $00:03:16.360 \longrightarrow 00:03:16.767$  environment,

NOTE Confidence: 0.865599513053894

00:03:16.767 --> 00:03:18.802 development and behavior all play

NOTE Confidence: 0.865599513053894

 $00{:}03{:}18.802 \dashrightarrow 00{:}03{:}21.919$ a role in a person's likelihood of

 $00:03:21.919 \longrightarrow 00:03:24.284$  having this disease of obesity.

NOTE Confidence: 0.865599513053894

 $00:03:24.290 \longrightarrow 00:03:26.322$  Now this is when we get into the

NOTE Confidence: 0.865599513053894

 $00{:}03{:}26.322 \dashrightarrow 00{:}03{:}28.203$ nitty gritty of really looking at

NOTE Confidence: 0.865599513053894

 $00:03:28.203 \longrightarrow 00:03:29.838$  the complexity of this disease.

NOTE Confidence: 0.865599513053894

 $00:03:29.840 \longrightarrow 00:03:31.592$  Let's look at how the body

NOTE Confidence: 0.865599513053894

00:03:31.592 --> 00:03:32.760 actually regulates food intake,

NOTE Confidence: 0.865599513053894

00:03:32.760 --> 00:03:34.506 and So what you're looking at,

NOTE Confidence: 0.865599513053894

 $00:03:34.510 \longrightarrow 00:03:36.940$  I'm going to look at be if we kind of

NOTE Confidence: 0.865599513053894

 $00{:}03{:}37.009 \dashrightarrow 00{:}03{:}39.321$  took us a cross section of the brain

NOTE Confidence: 0.865599513053894

 $00:03:39.321 \longrightarrow 00:03:41.809$  and get to the central portion here,

NOTE Confidence: 0.865599513053894

 $00:03:41.810 \longrightarrow 00:03:43.819$  we will get to the hypothalamus right

NOTE Confidence: 0.865599513053894

 $00:03:43.819 \longrightarrow 00:03:45.609$  in the hypothalamus is getting signals

NOTE Confidence: 0.865599513053894

 $00:03:45.609 \longrightarrow 00:03:47.355$  from different parts of our body,

NOTE Confidence: 0.865599513053894

00:03:47.360 --> 00:03:49.070 which is governing our intake of

NOTE Confidence: 0.865599513053894

 $00:03:49.070 \longrightarrow 00:03:51.151$  food and storage of food is getting

00:03:51.151 --> 00:03:52.909 left in from our adipose tissue.

NOTE Confidence: 0.865599513053894

 $00{:}03{:}52.910 \dashrightarrow 00{:}03{:}54.680$  Peptide YY from our large intestine.

NOTE Confidence: 0.865599513053894

 $00:03:54.680 \longrightarrow 00:03:56.240$  Cholecyst acain in from our

NOTE Confidence: 0.865599513053894

 $00:03:56.240 \longrightarrow 00:03:57.176$  small intestine insulin,

NOTE Confidence: 0.865599513053894 00:03:57.180 --> 00:03:57.806 of course, NOTE Confidence: 0.865599513053894

 $00:03:57.806 \longrightarrow 00:03:59.997$  from the pancreas grilling from the stomach.

NOTE Confidence: 0.865599513053894

 $00:04:00.000 \longrightarrow 00:04:01.815$  Sending signals back via the

NOTE Confidence: 0.865599513053894

00:04:01.815 --> 00:04:03.945 spinous smile and vagus nerve to

NOTE Confidence: 0.865599513053894

 $00:04:03.945 \longrightarrow 00:04:05.945$  tell us not only how much to eat,

NOTE Confidence: 0.865599513053894

 $00:04:05.950 \longrightarrow 00:04:08.446$  but to tell us how much to store.

NOTE Confidence: 0.865599513053894

 $00{:}04{:}08.450 \dashrightarrow 00{:}04{:}10.664$  Now let's look at these substances

NOTE Confidence: 0.865599513053894

 $00:04:10.664 \longrightarrow 00:04:12.720$  in a little more detail.

NOTE Confidence: 0.865599513053894

 $00:04:12.720 \longrightarrow 00:04:15.258$  So that we can see what the substances are,

NOTE Confidence: 0.865599513053894

 $00:04:15.260 \longrightarrow 00:04:16.670$  where they are being produced,

NOTE Confidence: 0.865599513053894

 $00:04:16.670 \longrightarrow 00:04:18.075$  and what their relevant effect

NOTE Confidence: 0.865599513053894

 $00:04:18.075 \longrightarrow 00:04:18.918$  on feeding are.

 $00:04:18.920 \longrightarrow 00:04:20.630$  So let's look at grilling so

NOTE Confidence: 0.865599513053894

 $00:04:20.630 \longrightarrow 00:04:22.030$  we can see Grill in.

NOTE Confidence: 0.865599513053894

 $00:04:22.030 \longrightarrow 00:04:23.934$  Here is being produced in the stomach

NOTE Confidence: 0.865599513053894

 $00:04:23.934 \longrightarrow 00:04:26.064$  in the fundus region of the stomach and

NOTE Confidence: 0.865599513053894

 $00:04:26.064 \longrightarrow 00:04:28.229$  also in the Inter and endocrine cells.

NOTE Confidence: 0.865599513053894

 $00:04:28.230 \longrightarrow 00:04:29.922$  It's also being produced in the

NOTE Confidence: 0.865599513053894

 $00:04:29.922 \longrightarrow 00:04:31.050$  neurons in the hypothalamus.

NOTE Confidence: 0.865599513053894

 $00{:}04{:}31.050 \dashrightarrow 00{:}04{:}33.378$  You can see that it's relevant effect on

NOTE Confidence: 0.865599513053894

 $00:04:33.378 \longrightarrow 00:04:35.555$  feeding is that it is all rexha genic,

NOTE Confidence: 0.865599513053894

 $00{:}04{:}35.560 \dashrightarrow 00{:}04{:}37.816$  which means it stimulates your appetite.

NOTE Confidence: 0.865599513053894

00:04:37.820 --> 00:04:38.482 Ananda mines,

NOTE Confidence: 0.865599513053894

 $00:04:38.482 \longrightarrow 00:04:40.799$  which are produced in the small intestine,

NOTE Confidence: 0.865599513053894

 $00{:}04{:}40.800 \dashrightarrow 00{:}04{:}42.582$  also have a relevant effect on

NOTE Confidence: 0.865599513053894

00:04:42.582 --> 00:04:44.945 feeding for it to be over exigent

NOTE Confidence: 0.865599513053894

 $00:04:44.945 \longrightarrow 00:04:46.429$  to stimulate our appetite.

00:04:46.430 --> 00:04:47.594 Insulin, of course,

NOTE Confidence: 0.865599513053894

 $00:04:47.594 \longrightarrow 00:04:49.534$  we're talking bout endogenous insulin

NOTE Confidence: 0.865599513053894

 $00:04:49.534 \longrightarrow 00:04:51.657$  here producing the beta cells in the

NOTE Confidence: 0.865599513053894

 $00:04:51.657 \longrightarrow 00:04:53.709$  islets of languor hands in the pancreas.

NOTE Confidence: 0.865599513053894

00:04:53.710 --> 00:04:55.365 It's relevant effect on feeding

NOTE Confidence: 0.865599513053894

 $00:04:55.365 \longrightarrow 00:04:57.020$  is that it is anorexigenic,

NOTE Confidence: 0.865599513053894

 $00:04:57.020 \longrightarrow 00:04:58.670$  which means it promotes satiety.

NOTE Confidence: 0.865599513053894

00:04:58.670 --> 00:04:59.672 And of course,

NOTE Confidence: 0.865599513053894

 $00:04:59.672 \longrightarrow 00:05:01.342$  this responsible for both glycogen

NOTE Confidence: 0.865599513053894

 $00:05:01.342 \longrightarrow 00:05:02.979$  and lipid storage left in,

NOTE Confidence: 0.865599513053894

 $00:05:02.980 \longrightarrow 00:05:05.360$  which in the short term is produced

NOTE Confidence: 0.865599513053894

 $00:05:05.360 \longrightarrow 00:05:07.608$  in the stomach in the long term,

NOTE Confidence: 0.865599513053894

 $00:05:07.610 \longrightarrow 00:05:07.931$  and.

NOTE Confidence: 0.865599513053894

 $00:05:07.931 \longrightarrow 00:05:09.536$  The Alpha sights or fat

NOTE Confidence: 0.865599513053894

 $00:05:09.536 \longrightarrow 00:05:10.820$  cells is relevant effect

NOTE Confidence: 0.77294153325698

00:05:10.885 --> 00:05:13.188 on feeding is that it is anorexigenic,

 $00:05:13.190 \longrightarrow 00:05:14.750$  which means that it promotes

NOTE Confidence: 0.77294153325698

 $00{:}05{:}14.750 \dashrightarrow 00{:}05{:}16.684$  satiety CCK or Cholecyst Acain and

NOTE Confidence: 0.77294153325698

 $00:05:16.684 \longrightarrow 00:05:18.269$  produced in the small intestine

NOTE Confidence: 0.77294153325698

 $00:05:18.269 \longrightarrow 00:05:20.020$  is responsible for early satiety.

NOTE Confidence: 0.77294153325698

 $00:05:20.020 \longrightarrow 00:05:22.218$  This is when you get full very

NOTE Confidence: 0.77294153325698

 $00:05:22.218 \longrightarrow 00:05:23.920$  quickly is also of course,

NOTE Confidence: 0.77294153325698

 $00:05:23.920 \longrightarrow 00:05:26.062$  responsible for the release of digestive

NOTE Confidence: 0.77294153325698

 $00{:}05{:}26.062 \dashrightarrow 00{:}05{:}28.160$  enzymes from the actor can pancreas

NOTE Confidence: 0.77294153325698

00:05:28.160 --> 00:05:29.996 bile from the Gallbladder and then

NOTE Confidence: 0.77294153325698

 $00{:}05{:}29.996 \dashrightarrow 00{:}05{:}32.466$  ask it from the bridal cells in the

NOTE Confidence: 0.77294153325698

00:05:32.466 --> 00:05:34.645 stomach and then finally peptide YY or

NOTE Confidence: 0.77294153325698

 $00:05:34.645 \longrightarrow 00:05:36.270$  peptide tyrosine tyrosine produced in

NOTE Confidence: 0.77294153325698

 $00{:}05{:}36.270 \dashrightarrow 00{:}05{:}38.606$  the distal portion of the small intestine.

NOTE Confidence: 0.77294153325698

 $00:05:38.610 \longrightarrow 00:05:41.409$  In the ileum and then also in the colon.

NOTE Confidence: 0.77294153325698

00:05:41.410 --> 00:05:42.745 It's also relevant effect on

 $00:05:42.745 \longrightarrow 00:05:44.830$  feeding is that it is anorexigenic,

NOTE Confidence: 0.77294153325698

 $00{:}05{:}44.830 \dashrightarrow 00{:}05{:}47.007$  which means that it promotes the tidy.

NOTE Confidence: 0.77294153325698

00:05:47.010 --> 00:05:48.816 Now we're going to focus on

NOTE Confidence: 0.77294153325698

 $00:05:48.816 \longrightarrow 00:05:50.430$  leptin in the subsequent slide,

NOTE Confidence: 0.77294153325698

 $00:05:50.430 \longrightarrow 00:05:52.432$  and we're going to look at the

NOTE Confidence: 0.77294153325698

00:05:52.432 --> 00:05:54.354 pathways by which left in controls

NOTE Confidence: 0.77294153325698

 $00{:}05{:}54.354 \dashrightarrow 00{:}05{:}56.029$  food intake in food storage.

NOTE Confidence: 0.77294153325698

 $00:05:56.030 \longrightarrow 00:05:58.397$  What you can see here or there are two

NOTE Confidence: 0.77294153325698

00:05:58.397 --> 00:06:00.380 primary pathways in the hypothalamus,

NOTE Confidence: 0.77294153325698

 $00:06:00.380 \longrightarrow 00:06:01.940$  by which one may signal.

NOTE Confidence: 0.77294153325698

 $00:06:01.940 \longrightarrow 00:06:03.806$  We're going to focus on this

NOTE Confidence: 0.77294153325698

 $00:06:03.806 \longrightarrow 00:06:05.050$  right pathway here first.

NOTE Confidence: 0.77294153325698 00:06:05.050 --> 00:06:05.995 So left in, NOTE Confidence: 0.77294153325698

 $00{:}06{:}05.995 \dashrightarrow 00{:}06{:}07.570$  which is signaling from the

NOTE Confidence: 0.77294153325698

 $00:06:07.570 \longrightarrow 00:06:08.859$  adipocytes or fat cells.

NOTE Confidence: 0.77294153325698

 $00:06:08.860 \longrightarrow 00:06:10.830$  Binds to Receptor and stimulates

 $00:06:10.830 \longrightarrow 00:06:13.464$  what's called the Palm C or

NOTE Confidence: 0.77294153325698

 $00:06:13.464 \longrightarrow 00:06:15.228$  the proopiomelanocortin neuron.

NOTE Confidence: 0.77294153325698

 $00{:}06{:}15.230 \dashrightarrow 00{:}06{:}17.505$  Here in the arcuate nucleus

NOTE Confidence: 0.77294153325698

 $00:06:17.505 \longrightarrow 00:06:18.870$  of the hypothalamus.

NOTE Confidence: 0.77294153325698

 $00:06:18.870 \longrightarrow 00:06:20.690$  When this neuron fires,

NOTE Confidence: 0.77294153325698

 $00{:}06{:}20.690 \to 00{:}06{:}22.965$  Alpha Milana site stimulating hormones,

NOTE Confidence: 0.77294153325698

 $00:06:22.970 \longrightarrow 00:06:25.240$  then bind toward called Milan.

NOTE Confidence: 0.77294153325698

 $00{:}06{:}25.240 \dashrightarrow 00{:}06{:}27.340$  According for receptors and you

NOTE Confidence: 0.77294153325698

 $00:06:27.340 \longrightarrow 00:06:30.455$  can see that this leads to the

NOTE Confidence: 0.77294153325698

 $00{:}06{:}30.455 \dashrightarrow 00{:}06{:}33.251$  production of BDNF which is brain

NOTE Confidence: 0.77294153325698

 $00:06:33.251 \longrightarrow 00:06:34.800$  derived neurotrophic factor.

NOTE Confidence: 0.77294153325698

 $00:06:34.800 \longrightarrow 00:06:36.660$  This releases an anorexigenic

NOTE Confidence: 0.77294153325698

 $00{:}06{:}36.660 \dashrightarrow 00{:}06{:}39.450$  signal and what happens to patients

NOTE Confidence: 0.77294153325698

 $00:06:39.530 \longrightarrow 00:06:41.680$  that travel down this pathway?

NOTE Confidence: 0.77294153325698

 $00:06:41.680 \longrightarrow 00:06:44.280$  As they have a lower intake of food

 $00:06:44.280 \longrightarrow 00:06:46.745$  and they have a lower intake of

NOTE Confidence: 0.77294153325698

 $00:06:46.745 \longrightarrow 00:06:49.450$  storage of the food that they do eat,

NOTE Confidence: 0.77294153325698

 $00:06:49.450 \longrightarrow 00:06:51.522$  so that's for patients that tend to

NOTE Confidence: 0.77294153325698

00:06:51.522 --> 00:06:54.343 be lean and we're very happy for them

NOTE Confidence: 0.77294153325698

00:06:54.343 --> 00:06:56.203 for travelling down this pathway,

NOTE Confidence: 0.77294153325698

00:06:56.210 --> 00:06:58.005 my patients exclusively have overweight

NOTE Confidence: 0.77294153325698

 $00{:}06{:}58.005 \dashrightarrow 00{:}07{:}00.165$  and obesity and travel down an

NOTE Confidence: 0.77294153325698

 $00:07:00.165 \longrightarrow 00:07:01.715$  alternative pathway were left in

NOTE Confidence: 0.77294153325698

 $00{:}07{:}01.715 \dashrightarrow 00{:}07{:}03.684$  bind to an alternative receptor and

NOTE Confidence: 0.77294153325698

 $00:07:03.684 \longrightarrow 00:07:06.015$  stimulates a different neuron in the brain.

NOTE Confidence: 0.77294153325698

 $00:07:06.020 \dashrightarrow 00:07:08.379$  This is called agout i related peptide neuron.

NOTE Confidence: 0.77294153325698

 $00:07:08.380 \longrightarrow 00:07:10.450$  This is here in the paraventricular

NOTE Confidence: 0.77294153325698

 $00:07:10.450 \longrightarrow 00:07:11.830$  nucleus of the hypothalamus.

NOTE Confidence: 0.77294153325698

 $00:07:11.830 \longrightarrow 00:07:14.021$  You can see that when the signals

NOTE Confidence: 0.77294153325698

00:07:14.021 --> 00:07:15.776 these agouti related peptides bind

NOTE Confidence: 0.77294153325698

 $00{:}07{:}15.776 \dashrightarrow 00{:}07{:}18.038$  instead to the plan according receptors

 $00:07:18.038 \longrightarrow 00:07:20.288$  and inhibit the formation of BDNF

NOTE Confidence: 0.77294153325698

 $00:07:20.288 \longrightarrow 00:07:22.083$  or brain derived neurotrophic factor

NOTE Confidence: 0.77294153325698

 $00:07:22.083 \longrightarrow 00:07:24.190$  and what happens is these patients

NOTE Confidence: 0.77294153325698

 $00:07:24.190 \longrightarrow 00:07:26.347$  receive and or exogenic signal which

NOTE Confidence: 0.77294153325698

00:07:26.347 --> 00:07:28.107 not only increases food intake,

NOTE Confidence: 0.77294153325698

 $00:07:28.110 \longrightarrow 00:07:30.480$  it also increases storage so it's

NOTE Confidence: 0.77294153325698

 $00:07:30.480 \longrightarrow 00:07:32.452$  actually something wrong with the

NOTE Confidence: 0.77294153325698

 $00{:}07{:}32.452 \longrightarrow 00{:}07{:}34.692$  signaling of how the brain sees and

NOTE Confidence: 0.77294153325698

00:07:34.692 --> 00:07:36.731 that's what dictates the difference in

NOTE Confidence: 0.77294153325698

 $00{:}07{:}36.731 \dashrightarrow 00{:}07{:}39.440$  how you could eat one meal and some one

NOTE Confidence: 0.77294153325698

 $00:07:39.440 \longrightarrow 00:07:42.280$  else can eat the same Milan they store.

NOTE Confidence: 0.77294153325698

 $00:07:42.280 \longrightarrow 00:07:44.177$  A lot more or less than you.

NOTE Confidence: 0.843638598918915

00:07:46.400 --> 00:07:48.362 Alright, so that may have been

NOTE Confidence: 0.843638598918915

 $00:07:48.362 \longrightarrow 00:07:49.670$  a little bit complicated,

NOTE Confidence: 0.843638598918915

00:07:49.670 --> 00:07:51.959 but you know we're all pretty savvy.

00:07:51.960 --> 00:07:54.309 So what we do know is that bring it

NOTE Confidence: 0.843638598918915

 $00{:}07{:}54.309 \dashrightarrow 00{:}07{:}56.797$  back down inside the brain is getting

NOTE Confidence: 0.843638598918915

00:07:56.797 --> 00:07:58.830 signals about our diet quality?

NOTE Confidence: 0.843638598918915

 $00:07:58.830 \longrightarrow 00:08:01.539$  OK, so we want our diet to look more

NOTE Confidence: 0.843638598918915

 $00:08:01.539 \longrightarrow 00:08:04.390$  of like what you see on the screen.

NOTE Confidence: 0.843638598918915

00:08:04.390 --> 00:08:05.658 Lean protein, whole grains,

NOTE Confidence: 0.843638598918915

00:08:05.658 --> 00:08:06.926 fruits and vegetables as

NOTE Confidence: 0.843638598918915

 $00:08:06.926 \longrightarrow 00:08:07.980$  our predominant sources.

NOTE Confidence: 0.843638598918915

00:08:07.980 --> 00:08:09.615 I'm a strong advocate in

NOTE Confidence: 0.843638598918915

00:08:09.615 --> 00:08:10.923 duration of diet quality,

NOTE Confidence: 0.843638598918915

 $00:08:10.930 \longrightarrow 00:08:13.909$  not putting you on a fad diet that will

NOTE Confidence: 0.843638598918915

 $00:08:13.909 \longrightarrow 00:08:16.810$  last kind of with the blink of an eye.

NOTE Confidence: 0.843638598918915

 $00:08:16.810 \longrightarrow 00:08:17.875$  We want sustainability.

NOTE Confidence: 0.843638598918915

 $00:08:17.875 \longrightarrow 00:08:19.650$  Over the course of time,

NOTE Confidence: 0.843638598918915

00:08:19.650 --> 00:08:21.058 physical activity does play

NOTE Confidence: 0.843638598918915

 $00:08:21.058 \longrightarrow 00:08:22.818$  a role in weight regulation,

 $00:08:22.820 \longrightarrow 00:08:25.204$  but what we are often selling to patients

NOTE Confidence: 0.843638598918915

 $00{:}08{:}25.204 \dashrightarrow 00{:}08{:}27.408$  is often the incorrect information.

NOTE Confidence: 0.843638598918915

 $00{:}08{:}27.410 \dashrightarrow 00{:}08{:}30.082$  So we tell people to exercise and exercise

NOTE Confidence: 0.843638598918915

 $00:08:30.082 \longrightarrow 00:08:33.060$  is by far one of my favorite pastimes.

NOTE Confidence: 0.843638598918915

00:08:33.060 --> 00:08:35.188 But were telling the wrong thing in

NOTE Confidence: 0.843638598918915

 $00:08:35.188 \longrightarrow 00:08:37.766$  terms of what we expect with regards

NOTE Confidence: 0.843638598918915

 $00:08:37.766 \longrightarrow 00:08:39.766$  to weight regulation from exercise.

NOTE Confidence: 0.843638598918915

 $00{:}08{:}39.770 \dashrightarrow 00{:}08{:}41.882$  One average exercise leads to weight

NOTE Confidence: 0.843638598918915

 $00{:}08{:}41.882 \dashrightarrow 00{:}08{:}43.632$  stability, not significant weight loss.

NOTE Confidence: 0.843638598918915

 $00:08:43.632 \longrightarrow 00:08:46.142$  Now that's not to imply that someone

NOTE Confidence: 0.843638598918915

00:08:46.142 --> 00:08:48.290 or some people can't lose weight.

NOTE Confidence: 0.843638598918915

00:08:48.290 --> 00:08:49.226 From exercise itself,

NOTE Confidence: 0.843638598918915

00:08:49.226 --> 00:08:51.410 but on average for many of us,

NOTE Confidence: 0.843638598918915

 $00:08:51.410 \longrightarrow 00:08:53.587$  it helps us to promote weight stability.

NOTE Confidence: 0.843638598918915

 $00:08:53.590 \longrightarrow 00:08:55.910$  So we want to sell that as the

00:08:55.910 --> 00:08:57.537 accurate message of what physical

NOTE Confidence: 0.843638598918915

 $00{:}08{:}57.537 \dashrightarrow 00{:}08{:}59.826$  activity does as it relates to wait.

NOTE Confidence: 0.84363859891891500:08:59.830 --> 00:09:00.412 Of course,

NOTE Confidence: 0.843638598918915

 $00:09:00.412 \longrightarrow 00:09:02.158$  there's a lot of other benefits

NOTE Confidence: 0.843638598918915

00:09:02.158 --> 00:09:03.270 with physical activity,

NOTE Confidence: 0.843638598918915

00:09:03.270 --> 00:09:04.830 but we're talking about weight,

NOTE Confidence: 0.843638598918915

00:09:04.830 --> 00:09:05.514 particularly today.

NOTE Confidence: 0.843638598918915 $00:09:05.514 \longrightarrow 00:09:06.198$  Now sleep. NOTE Confidence: 0.843638598918915

00:09:06.198 --> 00:09:08.823 This is what you guys brought me here

NOTE Confidence: 0.843638598918915

00:09:08.823 --> 00:09:10.871 to talk about or think about is sleep

NOTE Confidence: 0.843638598918915

 $00:09:10.937 \longrightarrow 00:09:12.562$  quality and duration definitely plays

NOTE Confidence: 0.843638598918915

 $00:09:12.562 \longrightarrow 00:09:14.991$  a large role in how the body regulates.

NOTE Confidence: 0.843638598918915

 $00:09:14.991 \longrightarrow 00:09:16.593$  Wait there complete half ways that

NOTE Confidence: 0.843638598918915

 $00:09:16.593 \longrightarrow 00:09:18.298$  talk about how the suprachiasmatic

NOTE Confidence: 0.843638598918915

 $00:09:18.298 \longrightarrow 00:09:19.690$  nucleus interferes with hypothalamic

NOTE Confidence: 0.843638598918915

 $00:09:19.690 \longrightarrow 00:09:20.800$  control of feeding.

 $00:09:20.800 \longrightarrow 00:09:23.257$  That really is suggests that the quality

NOTE Confidence: 0.843638598918915

 $00:09:23.257 \longrightarrow 00:09:25.876$  of 1 sleep can be drastically affected

NOTE Confidence: 0.843638598918915

 $00{:}09{:}25.876 \dashrightarrow 00{:}09{:}29.010$  an if the quality of sleep is affected.

NOTE Confidence: 0.843638598918915

 $00:09:29.010 \longrightarrow 00:09:30.870$  It affects the feeding behaviors,

NOTE Confidence: 0.843638598918915

 $00:09:30.870 \longrightarrow 00:09:32.735$  medications that we as doctors

NOTE Confidence: 0.843638598918915

00:09:32.735 --> 00:09:34.600 prescribe do cause weight gain.

NOTE Confidence: 0.843638598918915

 $00:09:34.600 \longrightarrow 00:09:36.838$  It is estimated that approximately 20%

NOTE Confidence: 0.843638598918915

 $00:09:36.840 \longrightarrow 00:09:39.848$  of the issues that we have in this

NOTE Confidence: 0.843638598918915

 $00:09:39.848 \longrightarrow 00:09:42.065$  country related to obesity are indeed

NOTE Confidence: 0.843638598918915

 $00:09:42.065 \longrightarrow 00:09:45.049$  do two things that we do is doctors.

NOTE Confidence: 0.843638598918915

 $00:09:45.050 \longrightarrow 00:09:46.538$  So medications that include

NOTE Confidence: 0.843638598918915

00:09:46.538 --> 00:09:48.398 everything from Lithium Deppe Coat,

NOTE Confidence: 0.843638598918915

 $00{:}09{:}48.400 \dashrightarrow 00{:}09{:}49.522$  Tegretol, Celexa, Cymbalta,

NOTE Confidence: 0.843638598918915

00:09:49.522 --> 00:09:51.014 Effexor, Paxil, Prozac, Ambient,

NOTE Confidence: 0.843638598918915

00:09:51.014 --> 00:09:52.130 Transitive, Monistic Gabapentin,

00:09:52.130 --> 00:09:53.618 Library clip, cyclamen pride.

NOTE Confidence: 0.843638598918915

 $00{:}09{:}53.618 --> 00{:}09{:}54.734$  Long term insulin.

NOTE Confidence: 0.843638598918915 $00:09:54.740 \longrightarrow 00:09:55.456$  Long term. NOTE Confidence: 0.843638598918915

 $00:09:55.456 \longrightarrow 00:09:57.604$  Prednisone beta blockers I VF medications.

NOTE Confidence: 0.843638598918915

 $00{:}09{:}57.610 \dashrightarrow 00{:}09{:}59.400$  Just name a few antihistamines.

NOTE Confidence: 0.843638598918915

 $00:09:59.400 \longrightarrow 00:10:01.518$  These are medications that can cause

NOTE Confidence: 0.843638598918915

00:10:01.518 --> 00:10:03.710 considerable weight gain in our patients,

NOTE Confidence: 0.843638598918915

 $00:10:03.710 \longrightarrow 00:10:06.318$  so we want to be mindful of the

NOTE Confidence: 0.843638598918915

 $00:10:06.318 \longrightarrow 00:10:07.703$  contract contribution that we're

NOTE Confidence: 0.843638598918915

00:10:07.703 --> 00:10:09.695 making to our patients and their

NOTE Confidence: 0.843638598918915

 $00{:}10{:}09.695 \dashrightarrow 00{:}10{:}11.968$  weight and weight regulation issues.

NOTE Confidence: 0.855165660381317

 $00:10:14.250 \longrightarrow 00:10:15.852$  This looks like another sweet picture

NOTE Confidence: 0.855165660381317

 $00:10:15.852 \longrightarrow 00:10:18.028$  and so you guys are sleep physicians.

NOTE Confidence: 0.855165660381317

00:10:18.030 --> 00:10:20.940 And so I wanted to make sure to indulge you,

NOTE Confidence: 0.855165660381317

 $00:10:20.940 \longrightarrow 00:10:22.440$  but this is a different sleeping

NOTE Confidence: 0.855165660381317

 $00{:}10{:}22.440 \dashrightarrow 00{:}10{:}24.374$  or this is looking at a gentleman

 $00:10:24.374 \longrightarrow 00:10:26.138$  that sleeping during the daytime so

NOTE Confidence: 0.855165660381317

 $00{:}10{:}26.138 \dashrightarrow 00{:}10{:}27.448$  circadian rhythm disturbances also

NOTE Confidence: 0.855165660381317

 $00:10:27.448 \longrightarrow 00:10:29.374$  can affect how the body regulates.

NOTE Confidence: 0.855165660381317

 $00:10:29.380 \longrightarrow 00:10:31.880$  Wait for some of us, we may be nocturnist

NOTE Confidence: 0.855165660381317

 $00:10:31.880 \longrightarrow 00:10:34.618$  and so we may have to work night shifts.

NOTE Confidence: 0.855165660381317

 $00:10:34.620 \longrightarrow 00:10:35.493$  Many nurses also.

NOTE Confidence: 0.855165660381317

 $00:10:35.493 \longrightarrow 00:10:36.657$  I'm in other professions.

NOTE Confidence: 0.855165660381317

 $00{:}10{:}36.660 \dashrightarrow 00{:}10{:}38.105$  Unfortunately the brain doesn't like

NOTE Confidence: 0.855165660381317

 $00:10:38.105 \longrightarrow 00:10:40.150$  to really be awake in the middle.

NOTE Confidence: 0.855165660381317

 $00:10:40.150 \longrightarrow 00:10:42.230$  Then I prefer to be a wake when

NOTE Confidence: 0.855165660381317

00:10:42.230 --> 00:10:44.322 it's bright outside like it is now

NOTE Confidence: 0.855165660381317

 $00:10:44.322 \longrightarrow 00:10:46.320$  both in Connecticut here in Boston.

NOTE Confidence: 0.855165660381317

 $00{:}10{:}46.320 \dashrightarrow 00{:}10{:}48.287$  I'm gonna sleep when it's dark outside,

NOTE Confidence: 0.855165660381317

00:10:48.290 --> 00:10:50.819 but when we turn the nail on his head,

NOTE Confidence: 0.855165660381317

00:10:50.820 --> 00:10:52.863 what we do know is the body wants to

 $00:10:52.863 \longrightarrow 00:10:54.574$  store more adipose and store more

NOTE Confidence: 0.855165660381317

 $00:10:54.574 \longrightarrow 00:10:56.698$  fat and so sometimes it's as simple

NOTE Confidence: 0.855165660381317

 $00:10:56.698 \longrightarrow 00:10:58.288$  as changing someone's work schedule

NOTE Confidence: 0.855165660381317

00:10:58.288 --> 00:11:00.655 that may lead to a change in weight

NOTE Confidence: 0.855165660381317

 $00:11:00.655 \longrightarrow 00:11:02.060$  status and then finally thermogenesis,

NOTE Confidence: 0.855165660381317

00:11:02.060 --> 00:11:03.817 which is how much the body burns

NOTE Confidence: 0.855165660381317

 $00:11:03.817 \longrightarrow 00:11:05.430$  at rest and with activity.

NOTE Confidence: 0.855165660381317

00:11:05.430 --> 00:11:07.397 A lot of this is genetically determined,

NOTE Confidence: 0.855165660381317

 $00:11:07.400 \longrightarrow 00:11:09.066$  but this does play a large role

NOTE Confidence: 0.855165660381317

 $00:11:09.066 \longrightarrow 00:11:11.102$  in how the central nervous system

NOTE Confidence: 0.855165660381317

 $00{:}11{:}11.102 \dashrightarrow 00{:}11{:}13.197$  regulates weight and weight control.

NOTE Confidence: 0.855165660381317

00:11:13.200 --> 00:11:13.486 Now,

NOTE Confidence: 0.855165660381317

 $00:11:13.486 \longrightarrow 00:11:15.488$  I don't anticipate that you guys will

NOTE Confidence: 0.855165660381317

 $00{:}11{:}15.488 \dashrightarrow 00{:}11{:}17.109$  internalize memorize this particular slide,

NOTE Confidence: 0.855165660381317

00:11:17.110 --> 00:11:19.518 but this is one of my favorite indeed,

NOTE Confidence: 0.855165660381317

 $00:11:19.520 \longrightarrow 00:11:21.200$  because it shows the complexity of

00:11:21.200 --> 00:11:22.982 obesity and all of the contributors

NOTE Confidence: 0.855165660381317

 $00:11:22.982 \longrightarrow 00:11:24.788$  that are outside of just calories

NOTE Confidence: 0.855165660381317

00:11:24.788 --> 00:11:26.140 in and calories out,

NOTE Confidence: 0.855165660381317

 $00:11:26.140 \longrightarrow 00:11:27.368$  which we disproved earlier.

NOTE Confidence: 0.855165660381317

 $00{:}11{:}27.368 \dashrightarrow 00{:}11{:}30.156$  And So what you can see here are that

NOTE Confidence: 0.855165660381317

 $00{:}11{:}30.156 \dashrightarrow 00{:}11{:}32.568$  there are things that are inside of a

NOTE Confidence: 0.855165660381317

00:11:32.568 --> 00:11:34.570 person that may lead to weight gain.

NOTE Confidence: 0.855165660381317

 $00{:}11{:}34.570 \dashrightarrow 00{:}11{:}36.628$  Things that are outside of a person

NOTE Confidence: 0.855165660381317

 $00:11:36.628 \longrightarrow 00:11:38.478$  that may lead to weight gain.

NOTE Confidence: 0.855165660381317

 $00:11:38.480 \longrightarrow 00:11:40.587$  You can see here this top row.

NOTE Confidence: 0.855165660381317

00:11:40.590 --> 00:11:42.110 These things increase one's intake

NOTE Confidence: 0.855165660381317

 $00:11:42.110 \longrightarrow 00:11:44.289$  and then here in this bottom row.

NOTE Confidence: 0.855165660381317

 $00{:}11{:}44.290 \dashrightarrow 00{:}11{:}45.675$  These are things that decrease

NOTE Confidence: 0.855165660381317

00:11:45.675 --> 00:11:47.368 expenditure and then here in the

NOTE Confidence: 0.855165660381317

 $00:11:47.368 \longrightarrow 00:11:48.892$  middle we have things that affect

00:11:48.892 --> 00:11:50.230 either intake or expenditure or

NOTE Confidence: 0.855165660381317

 $00:11:50.230 \longrightarrow 00:11:51.814$  we haven't yet figured it out.

NOTE Confidence: 0.855165660381317 00:11:51.820 --> 00:11:52.612 You can see,

NOTE Confidence: 0.855165660381317

00:11:52.612 --> 00:11:53.932 maybe unknown if you're looking

NOTE Confidence: 0.855165660381317

00:11:53.932 --> 00:11:55.588 at your screen very well now.

NOTE Confidence: 0.855165660381317

00:11:55.590 --> 00:11:56.662 For those of you,

NOTE Confidence: 0.855165660381317

00:11:56.662 --> 00:11:57.734 hopefully that aren't colorblind,

NOTE Confidence: 0.855165660381317

 $00{:}11{:}57.740 \dashrightarrow 00{:}11{:}59.282$  there are different colors on the

NOTE Confidence: 0.855165660381317

 $00{:}11{:}59.282 \to 00{:}12{:}00.912$  screen that actually means something in

NOTE Confidence: 0.855165660381317

 $00{:}12{:}00.912 \dashrightarrow 00{:}12{:}02.287$  these are contributors or influencers

NOTE Confidence: 0.855165660381317

 $00{:}12{:}02.287 \dashrightarrow 00{:}12{:}03.930$  to our weight and weight status.

NOTE Confidence: 0.855165660381317

 $00:12:03.930 \longrightarrow 00:12:06.171$  We're going to look at this in a little

NOTE Confidence: 0.855165660381317

 $00:12:06.171 \longrightarrow 00:12:08.227$  bit more detail in the next slide.

NOTE Confidence: 0.848095178604126

 $00:12:10.900 \longrightarrow 00:12:12.380$  So the contributors and influencers

NOTE Confidence: 0.848095178604126

 $00:12:12.380 \longrightarrow 00:12:14.268$  to obesity are as follows their

NOTE Confidence: 0.848095178604126

 $00:12:14.268 \longrightarrow 00:12:15.668$  biological or medical reasons.

 $00:12:15.670 \longrightarrow 00:12:17.686$  Why someone may struggle with their weight

NOTE Confidence: 0.848095178604126

00:12:17.686 --> 00:12:19.799 food and beverage behavior and environment,

NOTE Confidence: 0.848095178604126

00:12:19.800 --> 00:12:20.754 maternal and developmental,

NOTE Confidence: 0.848095178604126

00:12:20.754 --> 00:12:21.390 social, psychological,

NOTE Confidence: 0.848095178604126

00:12:21.390 --> 00:12:22.344 economic and environmental

NOTE Confidence: 0.848095178604126

00:12:22.344 --> 00:12:23.616 pressures on physical activity.

NOTE Confidence: 0.848095178604126

00:12:23.620 --> 00:12:26.266 We're going to pull out a few of these

NOTE Confidence: 0.848095178604126

 $00:12:26.266 \longrightarrow 00:12:27.961$  things from these categories just

NOTE Confidence: 0.848095178604126

 $00{:}12{:}27.961 \dashrightarrow 00{:}12{:}30.619$  to get a sense of what's going on.

NOTE Confidence: 0.848095178604126

 $00{:}12{:}30.620 \dashrightarrow 00{:}12{:}32.468$  And we're looking now at contribute

NOTE Confidence: 0.848095178604126

 $00:12:32.468 \longrightarrow 00:12:34.429$  obesity that happened within an individual.

NOTE Confidence: 0.848095178604126

00:12:34.430 --> 00:12:36.726 I couldn't pull out every single thing

NOTE Confidence: 0.848095178604126

 $00:12:36.726 \longrightarrow 00:12:39.197$  we'd be here for the rest of today,

NOTE Confidence: 0.848095178604126

 $00:12:39.200 \longrightarrow 00:12:42.125$  but let's just look at a few of these.

NOTE Confidence: 0.848095178604126

 $00:12:42.130 \longrightarrow 00:12:44.377$  Things that may increase intake are hyper

00:12:44.377 --> 00:12:45.860 reactivity to environmental food cues,

NOTE Confidence: 0.848095178604126

 $00:12:45.860 \longrightarrow 00:12:48.084$  so you pass by a pizza shop an

NOTE Confidence: 0.848095178604126

00:12:48.084 --> 00:12:50.527 all of a sudden you want pizza,

NOTE Confidence: 0.848095178604126

 $00:12:50.530 \longrightarrow 00:12:52.950$  and I passed by it and I'm like I don't

NOTE Confidence: 0.848095178604126

 $00:12:53.015 \longrightarrow 00:12:55.499$  really want pizza delayed satiety thing.

NOTE Confidence: 0.848095178604126 00:12:55.500 --> 00:12:56.042 You know, NOTE Confidence: 0.848095178604126

00:12:56.042 --> 00:12:57.668 people take along time filling full

NOTE Confidence: 0.848095178604126

 $00:12:57.668 \longrightarrow 00:12:59.645$  and then disordered eating things that

NOTE Confidence: 0.848095178604126

 $00:12:59.645 \longrightarrow 00:13:01.375$  may decrease expenditure or issues

NOTE Confidence: 0.848095178604126

 $00:13:01.375 \longrightarrow 00:13:03.279$  like changes in the gut microbiota.

NOTE Confidence: 0.848095178604126

 $00{:}13{:}03.280 \dashrightarrow 00{:}13{:}05.296$  What we do know is that the gut

NOTE Confidence: 0.848095178604126

00:13:05.296 --> 00:13:07.189 microbiota of those that are laying

NOTE Confidence: 0.848095178604126

 $00:13:07.189 \longrightarrow 00:13:09.175$  versus those that have obesity differ

NOTE Confidence: 0.848095178604126

 $00:13:09.238 \longrightarrow 00:13:11.260$  quite drastically in terms of the

NOTE Confidence: 0.848095178604126

00:13:11.260 --> 00:13:13.180 type of bacteria president once got.

NOTE Confidence: 0.848095178604126

 $00:13:13.180 \longrightarrow 00:13:15.460$  So much so that some of the studies

00:13:15.524 --> 00:13:17.690 that we're conducting here in MGH

NOTE Confidence: 0.848095178604126

 $00:13:17.690 \longrightarrow 00:13:19.883$  are really to ascertain exactly what

NOTE Confidence: 0.848095178604126

 $00:13:19.883 \longrightarrow 00:13:22.277$  this happened and we kind of deserve

NOTE Confidence: 0.848095178604126

00:13:22.277 --> 00:13:23.940 this from doing fecal transplants

NOTE Confidence: 0.848095178604126

 $00:13:23.940 \longrightarrow 00:13:25.920$  for patients that had refractory C

NOTE Confidence: 0.848095178604126

00:13:25.973 --> 00:13:27.953 diff when patients were receiving a

NOTE Confidence: 0.848095178604126

00:13:27.953 --> 00:13:29.640 fecal transplant from Uline Donor,

NOTE Confidence: 0.848095178604126

 $00{:}13{:}29.640 \dashrightarrow 00{:}13{:}31.524$  they distorted to lose weight when

NOTE Confidence: 0.848095178604126

00:13:31.524 --> 00:13:33.191 they're receiving a fecal transplant

NOTE Confidence: 0.848095178604126

00:13:33.191 --> 00:13:34.976 from someone that had obesity,

NOTE Confidence: 0.848095178604126

 $00:13:34.980 \longrightarrow 00:13:37.080$  they started to gain weight and so

NOTE Confidence: 0.848095178604126

 $00{:}13{:}37.080 \dashrightarrow 00{:}13{:}39.193$  one of our lead investigators on

NOTE Confidence: 0.848095178604126

 $00{:}13{:}39.193 \dashrightarrow 00{:}13{:}41.473$  this particular topic here in GH

NOTE Confidence: 0.848095178604126

00:13:41.473 --> 00:13:44.383 is a woman by the name of Lane you

NOTE Confidence: 0.848095178604126

 $00:13:44.383 \longrightarrow 00:13:46.200$  who's studying this in more detail.

00:13:46.200 --> 00:13:48.685 To really figure out how we might be

NOTE Confidence: 0.848095178604126

 $00:13:48.685 \longrightarrow 00:13:51.141$  able to use this as Therapeutics when we

NOTE Confidence: 0.848095178604126

 $00:13:51.205 \longrightarrow 00:13:53.900$  look at the gut microbiota thermal Genesis,

NOTE Confidence: 0.848095178604126

 $00:13:53.900 \longrightarrow 00:13:56.175$  we talked about a little bit earlier,

NOTE Confidence: 0.848095178604126

 $00:13:56.180 \longrightarrow 00:13:57.805$  and then if someone has

NOTE Confidence: 0.848095178604126

00:13:57.805 --> 00:13:58.455 physical disabilities,

NOTE Confidence: 0.848095178604126

 $00:13:58.460 \longrightarrow 00:13:59.752$  obviously that decreases expenditure.

NOTE Confidence: 0.848095178604126

 $00:13:59.752 \longrightarrow 00:14:01.044$  Things that increase intake

NOTE Confidence: 0.848095178604126

 $00{:}14{:}01.044 \dashrightarrow 00{:}14{:}02.381$  and decrease expenditure are

NOTE Confidence: 0.848095178604126

 $00:14:02.381 \longrightarrow 00:14:03.677$  genetic and epigenetic factors.

NOTE Confidence: 0.848095178604126

 $00{:}14{:}03.680 \dashrightarrow 00{:}14{:}06.371$  And here I'd like to pause and say it's

NOTE Confidence: 0.848095178604126

 $00:14:06.371 \longrightarrow 00:14:08.379$  important for us to recognize that

NOTE Confidence: 0.848095178604126

00:14:08.379 --> 00:14:10.520 weight is more heritable than height,

NOTE Confidence: 0.848095178604126

 $00:14:10.520 \longrightarrow 00:14:12.476$  so I'll say that once again,

NOTE Confidence: 0.848095178604126

00:14:12.480 --> 00:14:14.436 wait is more heritable than height,

NOTE Confidence: 0.848095178604126

 $00:14:14.440 \longrightarrow 00:14:16.806$  so we know that the genetic contribution.

 $00:14:16.810 \longrightarrow 00:14:17.719$  From our parents.

NOTE Confidence: 0.848095178604126

 $00:14:17.719 \longrightarrow 00:14:19.537$  In terms of our weight status

NOTE Confidence: 0.848095178604126

 $00:14:19.537 \longrightarrow 00:14:21.352$  determines our weight and such that

NOTE Confidence: 0.848095178604126

00:14:21.352 --> 00:14:22.812 if patients have severe obesity

NOTE Confidence: 0.848095178604126

00:14:22.870 --> 00:14:24.490 or parents have severe obesity,

NOTE Confidence: 0.848095178604126

00:14:24.490 --> 00:14:26.415 but likelihood that their offspring

NOTE Confidence: 0.848095178604126

00:14:26.415 --> 00:14:28.802 will indeed have severe obesity is on

NOTE Confidence: 0.848095178604126

 $00:14:28.802 \longrightarrow 00:14:30.330$  the order of 50 to 85% likelihood,

NOTE Confidence: 0.848095178604126

 $00:14:30.330 \longrightarrow 00:14:32.570$  even if we're virtuous and do all

NOTE Confidence: 0.848095178604126

00:14:32.570 --> 00:14:34.762 the right things once they get here

NOTE Confidence: 0.848095178604126

00:14:34.762 --> 00:14:37.070 breast feed for the first year of life,

NOTE Confidence: 0.848095178604126

 $00:14:37.070 \longrightarrow 00:14:38.610$  don't feed processed foods, etc.

NOTE Confidence: 0.848095178604126

 $00{:}14{:}38.610 \dashrightarrow 00{:}14{:}40.338$  So it's important for us to

NOTE Confidence: 0.848095178604126

 $00:14:40.338 \longrightarrow 00:14:41.980$  recognize that age related changes.

NOTE Confidence: 0.848095178604126

 $00:14:41.980 \longrightarrow 00:14:43.208$  Age related changes are

00:14:43.208 --> 00:14:44.436 particularly important for women.

NOTE Confidence: 0.848095178604126

 $00:14:44.440 \longrightarrow 00:14:45.970$  There are three primary times

NOTE Confidence: 0.848095178604126

 $00:14:45.970 \longrightarrow 00:14:47.874$  doing a woman's life, by which.

NOTE Confidence: 0.848095178604126

 $00:14:47.874 \longrightarrow 00:14:49.222$  Should significant hormonal changes

NOTE Confidence: 0.848095178604126

 $00:14:49.222 \longrightarrow 00:14:51.550$  can happen that lead to weight changes,

NOTE Confidence: 0.797860264778137

00:14:51.550 --> 00:14:53.230 I'm Ethel instead of menses.

NOTE Confidence: 0.797860264778137

 $00:14:53.230 \longrightarrow 00:14:55.726$  Number 1 #2. If they decide to have

NOTE Confidence: 0.797860264778137

00:14:55.726 --> 00:14:58.016 children or get pregnant and then at

NOTE Confidence: 0.797860264778137

 $00:14:58.016 \longrightarrow 00:15:00.800$  the third stage of Life which is in

NOTE Confidence: 0.797860264778137

 $00:15:00.800 \longrightarrow 00:15:02.670$  the period post menopausal phase.

NOTE Confidence: 0.797860264778137

 $00:15:02.670 \longrightarrow 00:15:04.578$  When we see that decline in

NOTE Confidence: 0.797860264778137

00:15:04.578 --> 00:15:06.273 estrogen and that change from

NOTE Confidence: 0.797860264778137

00:15:06.273 --> 00:15:08.058 a gynoid distribution in fact,

NOTE Confidence: 0.797860264778137

 $00:15:08.060 \longrightarrow 00:15:09.750$  which is in the hip,

NOTE Confidence: 0.797860264778137

00:15:09.750 --> 00:15:11.090 buttock, and thigh region,

NOTE Confidence: 0.797860264778137

 $00{:}15{:}11.090 \dashrightarrow 00{:}15{:}12.765$  typically in the subcu tissue

 $00:15:12.765 \longrightarrow 00:15:14.722$  to more of a central adipose

NOTE Confidence: 0.797860264778137

 $00:15:14.722 \longrightarrow 00:15:16.282$  tissue that happens with that

NOTE Confidence: 0.797860264778137

00:15:16.347 --> 00:15:17.939 down regulation of estrogen.

NOTE Confidence: 0.797860264778137

 $00:15:17.940 \longrightarrow 00:15:19.293$  Mood disturbances so

NOTE Confidence: 0.797860264778137

00:15:19.293 --> 00:15:21.097 depression anxiety for example.

NOTE Confidence: 0.797860264778137

 $00:15:21.100 \longrightarrow 00:15:23.728$  Julie to increase intake

NOTE Confidence: 0.797860264778137

 $00:15:23.728 \longrightarrow 00:15:25.699$  and decrease expenditure.

NOTE Confidence: 0.797860264778137

 $00:15:25.700 \longrightarrow 00:15:27.470$  Things that happen outside of a

NOTE Confidence: 0.797860264778137

 $00{:}15{:}27.470 \dashrightarrow 00{:}15{:}29.780$  person that may lead to obesity or

NOTE Confidence: 0.797860264778137

 $00{:}15{:}29.780 \longrightarrow 00{:}15{:}31.922$  things that may increase intake are

NOTE Confidence: 0.797860264778137

00:15:31.922 --> 00:15:33.408 environmental toxins, pervasive food,

NOTE Confidence: 0.797860264778137

 $00:15:33.408 \longrightarrow 00:15:35.078$  advertising in large portion sizes.

NOTE Confidence: 0.797860264778137

 $00:15:35.080 \longrightarrow 00:15:37.090$  Those are things we've always heard,

NOTE Confidence: 0.797860264778137

 $00{:}15{:}37.090 \dashrightarrow 00{:}15{:}38.770$  things that may decrease expenditure.

NOTE Confidence: 0.797860264778137

00:15:38.770 --> 00:15:40.440 The built environment, sedentary time,

 $00:15:40.440 \longrightarrow 00:15:41.640$  and labor saving devices,

NOTE Confidence: 0.797860264778137

 $00:15:41.640 \longrightarrow 00:15:43.440$  and then things that may increase

NOTE Confidence: 0.797860264778137

 $00:15:43.499 \longrightarrow 00:15:45.127$  intake and decrease expenditure.

NOTE Confidence: 0.797860264778137

 $00:15:45.130 \longrightarrow 00:15:47.475$  Things like stress with that chronic stress.

NOTE Confidence: 0.797860264778137

 $00:15:47.480 \longrightarrow 00:15:48.482$  Racism, for example.

NOTE Confidence: 0.797860264778137

00:15:48.482 --> 00:15:49.150 Weight cycling.

NOTE Confidence: 0.797860264778137

00:15:49.150 --> 00:15:51.726 Meaning if you go on a diet and

NOTE Confidence: 0.797860264778137

00:15:51.726 --> 00:15:53.875 then offer diet, wanted it off.

NOTE Confidence: 0.797860264778137

 $00{:}15{:}53.875 \longrightarrow 00{:}15{:}55.945$  The diet typically leads to the

NOTE Confidence: 0.797860264778137

00:15:55.945 --> 00:15:58.177 weight set point for an individual.

NOTE Confidence: 0.797860264778137

 $00{:}15{:}58.180 {\: -->\:} 00{:}15{:}59.221$  Doing to climb.

NOTE Confidence: 0.797860264778137

 $00:15:59.221 \longrightarrow 00:16:00.956$  And as we mentioned earlier,

NOTE Confidence: 0.797860264778137

 $00:16:00.960 \longrightarrow 00:16:02.572$  maternal and paternal obesity.

NOTE Confidence: 0.797860264778137

00:16:02.572 --> 00:16:04.990 Now since we ended with maternal

NOTE Confidence: 0.797860264778137

 $00:16:05.056 \longrightarrow 00:16:06.400$  and paternal obesity,

NOTE Confidence: 0.797860264778137

 $00{:}16{:}06.400 \dashrightarrow 00{:}16{:}08.808$  this is by design that I would begin

00:16:08.808 --> 00:16:11.119 to talk about fetal programming,

NOTE Confidence: 0.797860264778137

 $00:16:11.120 \longrightarrow 00:16:13.136$  and this is the concept is that

NOTE Confidence: 0.797860264778137

 $00:16:13.136 \longrightarrow 00:16:15.448$  of a mother goes into pregnancy

NOTE Confidence: 0.797860264778137

 $00:16:15.448 \longrightarrow 00:16:17.284$  with overweight and obesity.

NOTE Confidence: 0.797860264778137

 $00:16:17.290 \longrightarrow 00:16:19.490$  She is in a state where she has

NOTE Confidence: 0.797860264778137

 $00:16:19.490 \longrightarrow 00:16:21.161$  a higher level of inflammation

NOTE Confidence: 0.797860264778137

 $00:16:21.161 \longrightarrow 00:16:23.611$  so you can see that they have

NOTE Confidence: 0.797860264778137

00:16:23.688 --> 00:16:25.270 increased inflammation,

NOTE Confidence: 0.797860264778137

00:16:25.270 --> 00:16:26.359 increase insulin resistance,

NOTE Confidence: 0.797860264778137

 $00{:}16{:}26.359 \rightarrow 00{:}16{:}28.537$  increasing like policies in VLDL Secretion,

NOTE Confidence: 0.797860264778137

 $00:16:28.540 \longrightarrow 00:16:30.350$  which leads to an increase

NOTE Confidence: 0.797860264778137

 $00:16:30.350 \longrightarrow 00:16:31.436$  in inflammatory markers,

NOTE Confidence: 0.797860264778137

 $00{:}16{:}31.440 \dashrightarrow 00{:}16{:}33.270$  particular Interleukin one interleukin 6.

NOTE Confidence: 0.797860264778137

 $00:16:33.270 \longrightarrow 00:16:34.437$  Tina Falfa MCP.

NOTE Confidence: 0.797860264778137

 $00:16:34.437 \longrightarrow 00:16:37.627$  One what that does is then affects the

 $00:16:37.627 \longrightarrow 00:16:40.739$  fetus and the fetus is exposed to lipids.

NOTE Confidence: 0.797860264778137

 $00{:}16{:}40.740 \dashrightarrow 00{:}16{:}42.705$  It reprograms their metabolic gene

NOTE Confidence: 0.797860264778137

 $00:16:42.705 \longrightarrow 00:16:44.670$  targets leading to fetal inflammation.

NOTE Confidence: 0.797860264778137

 $00:16:44.670 \longrightarrow 00:16:47.218$  An increase in hepatic lipids also issues

NOTE Confidence: 0.797860264778137

 $00:16:47.218 \longrightarrow 00:16:49.779$  in the skeletal muscle adipose tissue.

NOTE Confidence: 0.797860264778137

 $00:16:49.780 \longrightarrow 00:16:52.796$  The brain in the pancreas and this leads

NOTE Confidence: 0.797860264778137

 $00:16:52.796 \longrightarrow 00:16:55.909$  to childhood risk of disease so non

NOTE Confidence: 0.797860264778137

 $00:16:55.909 \longrightarrow 00:16:58.189$  alcoholic fatty liver disease resistance.

NOTE Confidence: 0.797860264778137

00:16:58.190 --> 00:17:01.838 Obesity Hyperphagia and Type 2 diabetes.

NOTE Confidence: 0.797860264778137

00:17:01.840 --> 00:17:04.816 So what has been done to study this?

NOTE Confidence: 0.797860264778137

 $00:17:04.820 \longrightarrow 00:17:07.025$  This is one of my favorite studies

NOTE Confidence: 0.797860264778137

 $00:17:07.025 \longrightarrow 00:17:09.175$  to show and demonstrate is the

NOTE Confidence: 0.797860264778137

 $00:17:09.175 \longrightarrow 00:17:11.437$  influence of a moms weight status

NOTE Confidence: 0.797860264778137

00:17:11.437 --> 00:17:14.146 in this generation on her offspring.

NOTE Confidence: 0.797860264778137

00:17:14.150 --> 00:17:15.642 In this particular study,

NOTE Confidence: 0.797860264778137

00:17:15.642 --> 00:17:17.880 they compared two sets of individuals,

 $00:17:17.880 \longrightarrow 00:17:20.400$  children's born to moms before she

NOTE Confidence: 0.797860264778137

 $00:17:20.400 \longrightarrow 00:17:22.471$  had metabolic and bariatric surgery

NOTE Confidence: 0.797860264778137

00:17:22.471 --> 00:17:25.333 in the form of a ruin Y gastric bypass.

NOTE Confidence: 0.797860264778137

00:17:25.340 --> 00:17:28.316 An after metabolic and beer at Ricks surgery.

NOTE Confidence: 0.797860264778137

 $00:17:28.320 \longrightarrow 00:17:30.924$  So BM S is before metabolic surgery.

NOTE Confidence: 0.797860264778137

 $00:17:30.930 \longrightarrow 00:17:32.450$  AMS after metabolic surgery.

NOTE Confidence: 0.797860264778137

 $00:17:32.450 \longrightarrow 00:17:33.970$  So we're comparing though.

NOTE Confidence: 0.797860264778137

 $00{:}17{:}33.970 \dashrightarrow 00{:}17{:}35.494$  The child that was born before

NOTE Confidence: 0.797860264778137

 $00:17:35.494 \longrightarrow 00:17:37.360$  to the child that was born after,

NOTE Confidence: 0.797860264778137

 $00{:}17{:}37.360 \dashrightarrow 00{:}17{:}39.106$  and so I want you to look at kind

NOTE Confidence: 0.797860264778137

 $00{:}17{:}39.106 \dashrightarrow 00{:}17{:}41.314$  of a side by side profile of these

NOTE Confidence: 0.797860264778137

 $00:17:41.314 \longrightarrow 00:17:43.179$  children born before and after mom

NOTE Confidence: 0.797860264778137

00:17:43.179 --> 00:17:44.148 had bariatric surgery,

NOTE Confidence: 0.797860264778137

00:17:44.150 --> 00:17:45.214 same mom and Dad.

NOTE Confidence: 0.797860264778137

 $00:17:45.214 \longrightarrow 00:17:47.020$  'cause That's a question that comes up.

 $00:17:47.020 \longrightarrow 00:17:49.630$  So I want to make sure I'm clear about that.

NOTE Confidence: 0.797860264778137

 $00{:}17{:}49.630 \dashrightarrow 00{:}17{:}51.322$  What you can see here appearing

NOTE Confidence: 0.797860264778137

 $00:17:51.322 \longrightarrow 00:17:52.450$  those children that were

NOTE Confidence: 0.84949803352356

 $00:17:52.509 \longrightarrow 00:17:54.378$  older compared to those were younger is

NOTE Confidence: 0.84949803352356

00:17:54.378 --> 00:17:56.569 that there an I want to look at these

NOTE Confidence: 0.84949803352356

00:17:56.569 --> 00:17:58.207 lovely P values that we're seeing over

NOTE Confidence: 0.84949803352356

 $00:17:58.207 \longrightarrow 00:17:59.950$  here that the wait was significantly less

NOTE Confidence: 0.84949803352356

 $00:17:59.993 \longrightarrow 00:18:01.637$  than those children born after surgery.

NOTE Confidence: 0.84949803352356

 $00:18:01.640 \longrightarrow 00:18:03.614$  There was a significant difference in

NOTE Confidence: 0.84949803352356

00:18:03.614 --> 00:18:05.275 the likelihood of Macrosomia Obviously

NOTE Confidence: 0.84949803352356

 $00{:}18{:}05.275 \dashrightarrow 00{:}18{:}07.333$  there was a different age because this

NOTE Confidence: 0.84949803352356

00:18:07.333 --> 00:18:09.169 these kids were born after surgery,

NOTE Confidence: 0.84949803352356

 $00{:}18{:}09.170 \dashrightarrow 00{:}18{:}10.910$  but BMI percentile was lower.

NOTE Confidence: 0.84949803352356

 $00{:}18{:}10.910 \dashrightarrow 00{:}18{:}12.650$  The weights, lower body fat,

NOTE Confidence: 0.84949803352356

 $00:18:12.650 \longrightarrow 00:18:15.086$  slower and some levels are lower glucose.

NOTE Confidence: 0.84949803352356

 $00:18:15.090 \longrightarrow 00:18:18.126$  Lowering that child boring after surgery.

 $00:18:18.130 \longrightarrow 00:18:20.482$  So what we can see here when we

NOTE Confidence: 0.84949803352356

 $00:18:20.482 \longrightarrow 00:18:22.921$  look at this in kind of detail

NOTE Confidence: 0.84949803352356

00:18:22.921 --> 00:18:25.380 in that child born after surgery,

NOTE Confidence: 0.84949803352356

 $00:18:25.380 \longrightarrow 00:18:27.342$  there's a three fold decrease in

NOTE Confidence: 0.84949803352356

 $00:18:27.342 \longrightarrow 00:18:29.088$  the prevalence of severe obesity

NOTE Confidence: 0.84949803352356

 $00:18:29.088 \longrightarrow 00:18:30.207$  in those children.

NOTE Confidence: 0.84949803352356

00:18:30.210 --> 00:18:31.191 There's improved influence,

NOTE Confidence: 0.84949803352356

 $00:18:31.191 \longrightarrow 00:18:33.153$  and Acitivity improved lipid profile and

NOTE Confidence: 0.84949803352356

 $00:18:33.153 \longrightarrow 00:18:35.379$  an improvement in our inflammatory markers.

NOTE Confidence: 0.84949803352356

 $00:18:35.380 \longrightarrow 00:18:37.324$  So just with making that intervention

NOTE Confidence: 0.84949803352356

 $00:18:37.324 \longrightarrow 00:18:39.520$  in mom and often after surgery,

NOTE Confidence: 0.84949803352356

 $00:18:39.520 \longrightarrow 00:18:40.900$  mom still have obesity.

NOTE Confidence: 0.84949803352356

 $00{:}18{:}40.900 \dashrightarrow 00{:}18{:}42.280$  But severity has improved,

NOTE Confidence: 0.84949803352356

 $00:18:42.280 \longrightarrow 00:18:45.115$  which means that likely the level of

NOTE Confidence: 0.84949803352356

00:18:45.115 --> 00:18:47.515 inflation is improved that this leads

 $00:18:47.515 \longrightarrow 00:18:50.105$  to an improved status for that child.

NOTE Confidence: 0.84949803352356

 $00{:}18{:}50.110 \dashrightarrow 00{:}18{:}51.844$  Now let's look at the guidelines

NOTE Confidence: 0.84949803352356

 $00:18:51.844 \longrightarrow 00:18:53.380$  that we are currently following

NOTE Confidence: 0.84949803352356

00:18:53.380 --> 00:18:54.985 here in the United States,

NOTE Confidence: 0.84949803352356

 $00:18:54.990 \longrightarrow 00:18:56.520$  the most commonly used guidelines,

NOTE Confidence: 0.84949803352356

 $00:18:56.520 \longrightarrow 00:18:58.648$  or those from the American Heart Association,

NOTE Confidence: 0.84949803352356

 $00:18:58.650 \longrightarrow 00:18:59.870$  American College of Cardiology.

NOTE Confidence: 0.84949803352356

 $00:18:59.870 \longrightarrow 00:19:01.090$  In the obesity society,

NOTE Confidence: 0.84949803352356

 $00:19:01.090 \longrightarrow 00:19:02.615$  this was a joint venture

NOTE Confidence: 0.84949803352356

 $00:19:02.615 \longrightarrow 00:19:03.835$  between the three groups.

NOTE Confidence: 0.84949803352356

00:19:03.840 --> 00:19:05.056 It obviously starts with

NOTE Confidence: 0.84949803352356

 $00:19:05.056 \longrightarrow 00:19:05.968$  the patient encounter.

NOTE Confidence: 0.84949803352356

00:19:05.970 --> 00:19:07.190 We measure height, weight,

NOTE Confidence: 0.84949803352356 00:19:07.190 --> 00:19:07.800 and BMI. NOTE Confidence: 0.84949803352356

 $00:19:07.800 \longrightarrow 00:19:10.180$  We determined that weight category is assess

NOTE Confidence: 0.84949803352356

 $00{:}19{:}10.180 \dashrightarrow 00{:}19{:}12.293$  and treat cardiovascular disease risk factors

 $00:19:12.293 \longrightarrow 00:19:14.363$  and assess weight and lifestyle histories.

NOTE Confidence: 0.84949803352356

 $00:19:14.370 \longrightarrow 00:19:15.875$  Obviously these are things that

NOTE Confidence: 0.84949803352356

 $00:19:15.875 \longrightarrow 00:19:17.079$  we're all familiar with,

NOTE Confidence: 0.84949803352356

 $00:19:17.080 \longrightarrow 00:19:18.284$  but just to recap,

NOTE Confidence: 0.84949803352356

 $00{:}19{:}18.284 --> 00{:}19{:}20.090$  we have our H&P that's done.

NOTE Confidence: 0.84949803352356

 $00:19:20.090 \longrightarrow 00:19:21.595$  We do our clinical laboratory

NOTE Confidence: 0.84949803352356

00:19:21.595 --> 00:19:23.100 assessments looking at blood pressure,

NOTE Confidence: 0.84949803352356

00:19:23.100 --> 00:19:23.919 fasting blood glucose,

NOTE Confidence: 0.84949803352356

 $00:19:23.919 \longrightarrow 00:19:25.557$  a lot of people would do

NOTE Confidence: 0.84949803352356

00:19:25.557 --> 00:19:27.009 a fasting lipid panel.

NOTE Confidence: 0.84949803352356

00:19:27.010 --> 00:19:28.816 We want to pay attention really,

NOTE Confidence: 0.84949803352356

 $00:19:28.820 \longrightarrow 00:19:30.927$  and I want to kind of push.

NOTE Confidence: 0.84949803352356

 $00{:}19{:}30.930 \dashrightarrow 00{:}19{:}32.730$  Start here with the waist circumference,

NOTE Confidence: 0.84949803352356

00:19:32.730 --> 00:19:34.837 because it's not just adipose or fat,

NOTE Confidence: 0.84949803352356

 $00:19:34.840 \longrightarrow 00:19:35.677$  it's weird distributed.

 $00:19:35.677 \longrightarrow 00:19:37.072$  That really leads to higher

NOTE Confidence: 0.84949803352356

00:19:37.072 --> 00:19:38.450 likelihood of metabolic disease.

NOTE Confidence: 0.84949803352356

00:19:38.450 --> 00:19:40.754 So I do measurement with just a simple

NOTE Confidence: 0.84949803352356

00:19:40.754 --> 00:19:42.968 tape measure at umbilicus at every visit,

NOTE Confidence: 0.84949803352356

 $00:19:42.970 \longrightarrow 00:19:44.818$  to determine what waist circumference is.

NOTE Confidence: 0.84949803352356

00:19:44.820 --> 00:19:46.972 And you can see our target is less

NOTE Confidence: 0.84949803352356

 $00:19:46.972 \longrightarrow 00:19:49.053$  than 35 inches in women and less

NOTE Confidence: 0.84949803352356

00:19:49.053 --> 00:19:51.489 than 40 inches at men at them until,

NOTE Confidence: 0.84949803352356

00:19:51.490 --> 00:19:53.230 like his most men don't wear

NOTE Confidence: 0.84949803352356

 $00:19:53.230 \longrightarrow 00:19:54.100$  their pants there,

NOTE Confidence: 0.84949803352356

 $00:19:54.100 \longrightarrow 00:19:56.420$  they'll come in and they'll tell me why.

NOTE Confidence: 0.84949803352356

00:19:56.420 --> 00:19:57.870 I'm a 40 inch waist,

NOTE Confidence: 0.84949803352356

 $00:19:57.870 \longrightarrow 00:19:59.406$  but they are wearing their pants

NOTE Confidence: 0.84949803352356

 $00{:}19{:}59.406 \dashrightarrow 00{:}20{:}01.145$  well below where we would measure

NOTE Confidence: 0.84949803352356

00:20:01.145 --> 00:20:02.800 for assessing Central Atapa City.

NOTE Confidence: 0.84949803352356

 $00:20:02.800 \longrightarrow 00:20:04.802$  We want to look at intensive management

 $00:20:04.802 \longrightarrow 00:20:06.279$  of cardiovascular disease risk factors,

NOTE Confidence: 0.84949803352356

00:20:06.280 --> 00:20:06.860 particularly hypertension,

NOTE Confidence: 0.84949803352356

00:20:06.860 --> 00:20:07.440 dyslipidemia, prediabetes,

NOTE Confidence: 0.84949803352356

 $00:20:07.440 \longrightarrow 00:20:08.020$  and diabetes.

NOTE Confidence: 0.84949803352356

 $00:20:08.020 \longrightarrow 00:20:08.917$  Obstructive sleep apnea,

NOTE Confidence: 0.84949803352356

00:20:08.917 --> 00:20:11.010 which is very germane to the work

NOTE Confidence: 0.84949803352356

 $00:20:11.062 \longrightarrow 00:20:12.658$  that you do and Sleep Medicine.

NOTE Confidence: 0.842742443084717

 $00:20:16.170 \longrightarrow 00:20:18.368$  We want to assess weight and lifestyle

NOTE Confidence: 0.842742443084717

 $00:20:18.368 \longrightarrow 00:20:20.349$  history when I ask questions about

NOTE Confidence: 0.842742443084717

 $00{:}20{:}20{:}349 \longrightarrow 00{:}20{:}22.631$  the history of weight gain and loss

NOTE Confidence: 0.842742443084717

 $00:20:22.690 \longrightarrow 00:20:24.972$  overtime that really has to do with

NOTE Confidence: 0.842742443084717

 $00:20:24.972 \longrightarrow 00:20:26.925$  that weight cycling question that we

NOTE Confidence: 0.842742443084717

 $00{:}20{:}26.925 \dashrightarrow 00{:}20{:}28.875$  talked about a little bit earlier.

NOTE Confidence: 0.842742443084717

 $00:20:28.880 \longrightarrow 00:20:31.272$  We want to look at details of previous

NOTE Confidence: 0.842742443084717

 $00:20:31.272 \longrightarrow 00:20:33.120$  weight loss attempts, dietary habits,

00:20:33.120 --> 00:20:34.745 looking at quality over hyper,

NOTE Confidence: 0.842742443084717

00:20:34.750 --> 00:20:36.380 focus on any caloric value,

NOTE Confidence: 0.842742443084717

00:20:36.380 --> 00:20:37.044 physical activity,

NOTE Confidence: 0.842742443084717

 $00:20:37.044 \longrightarrow 00:20:39.036$  a family history of obesity is

NOTE Confidence: 0.842742443084717

 $00:20:39.036 \longrightarrow 00:20:40.672$  extremely important and any other

NOTE Confidence: 0.842742443084717

 $00{:}20{:}40.672 \dashrightarrow 00{:}20{:}41.904$  medical additions or medications

NOTE Confidence: 0.842742443084717

00:20:41.904 --> 00:20:43.550 that actually may affect weight.

NOTE Confidence: 0.842742443084717

 $00:20:43.550 \longrightarrow 00:20:44.762$  As we talked about.

NOTE Confidence: 0.842742443084717

 $00{:}20{:}44.762 \longrightarrow 00{:}20{:}47.399$  And then we want to test with patients

NOTE Confidence: 0.842742443084717

00:20:47.399 --> 00:20:50.375 will be the need to lose weight advised,

NOTE Confidence: 0.842742443084717

 $00{:}20{:}50.380 \to 00{:}20{:}52.445$  avoid weight gain and other risk factors

NOTE Confidence: 0.842742443084717

 $00:20:52.445 \longrightarrow 00:20:54.229$  assess their readiness to make change

NOTE Confidence: 0.842742443084717

 $00{:}20{:}54.229 \dashrightarrow 00{:}20{:}55.634$  and identify barriers to success.

NOTE Confidence: 0.842742443084717

 $00:20:55.640 \longrightarrow 00:20:57.100$  Each person will have their

NOTE Confidence: 0.842742443084717

 $00:20:57.100 \longrightarrow 00:20:58.268$  own set of barriers.

NOTE Confidence: 0.842742443084717

 $00:20:58.270 \longrightarrow 00:20:59.929$  We want to determine weight loss and

 $00:20:59.929 \longrightarrow 00:21:01.769$  health goals and intervention strategies.

NOTE Confidence: 0.842742443084717

00:21:01.770 --> 00:21:03.594 I don't typically let my patients

NOTE Confidence: 0.842742443084717

 $00:21:03.594 \longrightarrow 00:21:05.569$  give me like I want to be.

NOTE Confidence: 0.842742443084717

 $00:21:05.570 \longrightarrow 00:21:05.855$  Ex.

NOTE Confidence: 0.842742443084717

 $00:21:05.855 \longrightarrow 00:21:06.710$  Wait, I mean,

NOTE Confidence: 0.842742443084717

 $00:21:06.710 \longrightarrow 00:21:09.360$  I guess that can let them tell me that,

NOTE Confidence: 0.842742443084717

00:21:09.360 --> 00:21:11.624 but I'd like to shy away from giving

NOTE Confidence: 0.842742443084717

 $00{:}21{:}11.624 \dashrightarrow 00{:}21{:}13.668$  them any key number and the reason

NOTE Confidence: 0.842742443084717

00:21:13.668 --> 00:21:16.089 why that is is that sets up really.

NOTE Confidence: 0.842742443084717

00:21:16.090 --> 00:21:16.726 Tough expectations.

NOTE Confidence: 0.842742443084717

00:21:16.726 --> 00:21:19.270 I have no idea how patients are going

NOTE Confidence: 0.842742443084717

 $00:21:19.334 \longrightarrow 00:21:20.814$  to respond to whatever modality

NOTE Confidence: 0.842742443084717

 $00{:}21{:}20.814 \dashrightarrow 00{:}21{:}23.075$  or the rapy that I use and so we

NOTE Confidence: 0.842742443084717

 $00:21:23.075 \longrightarrow 00:21:24.755$  wanted to see what the body does.

NOTE Confidence: 0.842742443084717

 $00:21:24.760 \longrightarrow 00:21:26.180$  Always tell my patients their

 $00:21:26.180 \longrightarrow 00:21:28.190$  body is the answer key and we

NOTE Confidence: 0.842742443084717

 $00:21:28.190 \longrightarrow 00:21:29.792$  will use these different tools to

NOTE Confidence: 0.842742443084717

 $00:21:29.792 \longrightarrow 00:21:31.697$  find out how their body responds.

NOTE Confidence: 0.842742443084717

 $00:21:31.700 \longrightarrow 00:21:33.428$  We want to look at comprehensive

NOTE Confidence: 0.842742443084717

 $00:21:33.428 \longrightarrow 00:21:34.292$  lifestyle therapies alone,

NOTE Confidence: 0.842742443084717

 $00:21:34.300 \longrightarrow 00:21:36.212$  so we want to start there and in

NOTE Confidence: 0.842742443084717

 $00:21:36.212 \longrightarrow 00:21:37.770$  conjunction with adjunctive therapies.

NOTE Confidence: 0.842742443084717

00:21:37.770 --> 00:21:39.498 Now I started at the beginning

NOTE Confidence: 0.842742443084717

 $00:21:39.498 \longrightarrow 00:21:40.362$  of the lecture.

NOTE Confidence: 0.842742443084717

 $00:21:40.370 \longrightarrow 00:21:42.538$  For those of you that are coming in

NOTE Confidence: 0.842742443084717

 $00{:}21{:}42.538 \dashrightarrow 00{:}21{:}44.352$  talking about the language that we

NOTE Confidence: 0.842742443084717

00:21:44.352 --> 00:21:46.176 use for patients that have obesity

NOTE Confidence: 0.842742443084717

 $00:21:46.235 \longrightarrow 00:21:47.945$  even need to not call patients.

NOTE Confidence: 0.842742443084717 00:21:47.950 --> 00:21:48.301 Obese, NOTE Confidence: 0.842742443084717

 $00:21:48.301 \longrightarrow 00:21:50.758$  but rather they have the disease of

NOTE Confidence: 0.842742443084717

 $00:21:50.758 \longrightarrow 00:21:53.607$  obesity and there's a reason why I say that.

 $00:21:53.610 \longrightarrow 00:21:55.698$  It's not just for to make me feel

NOTE Confidence: 0.842742443084717

00:21:55.698 --> 00:21:57.747 warm and fuzzy inside is because

NOTE Confidence: 0.842742443084717

 $00:21:57.747 \longrightarrow 00:21:59.577$  actually weight stigma does lead

NOTE Confidence: 0.842742443084717

00:21:59.577 --> 00:22:01.938 to poor outcomes for our patients.

NOTE Confidence: 0.842742443084717

 $00:22:01.940 \longrightarrow 00:22:03.565$  So when patients experience weight

NOTE Confidence: 0.842742443084717

 $00:22:03.565 \longrightarrow 00:22:05.600$  stigma that leads to increased stress,

NOTE Confidence: 0.842742443084717

 $00:22:05.600 \longrightarrow 00:22:07.535$  that increased stress actually affects

NOTE Confidence: 0.842742443084717

 $00:22:07.535 \longrightarrow 00:22:09.470$  eating and physical activity behaviors

NOTE Confidence: 0.842742443084717

 $00:22:09.526 \longrightarrow 00:22:11.590$  where we see things such as binge eating,

NOTE Confidence: 0.842742443084717

 $00{:}22{:}11.590 \dashrightarrow 00{:}22{:}12.589$  increased caloric consumption,

NOTE Confidence: 0.842742443084717

00:22:12.589 --> 00:22:13.588 maladaptive weight control,

NOTE Confidence: 0.842742443084717

 $00:22:13.590 \longrightarrow 00:22:15.684$  disordered eating in a lower motivation

NOTE Confidence: 0.842742443084717

 $00{:}22{:}15.684 \to 00{:}22{:}18.170$  for exercise and less physical activity.

NOTE Confidence: 0.842742443084717

 $00:22:18.170 \longrightarrow 00:22:19.454$  That stress actually leads

NOTE Confidence: 0.842742443084717

00:22:19.454 --> 00:22:20.417 to physiological reactivity,

 $00:22:20.420 \longrightarrow 00:22:22.988$  and I think that's something that we're not.

NOTE Confidence: 0.842742443084717

 $00{:}22{:}22.990 \to 00{:}22{:}24.910$  We're not may be often clear about.

NOTE Confidence: 0.842742443084717

 $00:22:24.910 \longrightarrow 00:22:26.375$  So when people experience weight

NOTE Confidence: 0.842742443084717

 $00:22:26.375 \longrightarrow 00:22:28.575$  stigma that leads to stress at least

NOTE Confidence: 0.842742443084717

 $00:22:28.575 \longrightarrow 00:22:30.285$  a physiological reactivity which is

NOTE Confidence: 0.842742443084717

00:22:30.285 --> 00:22:32.288 demonstrated by increased levels of cortisol,

NOTE Confidence: 0.842742443084717 00:22:32.290 --> 00:22:33.030 CR, P, NOTE Confidence: 0.842742443084717

00:22:33.030 --> 00:22:33.400 A1C,

NOTE Confidence: 0.842742443084717

 $00{:}22{:}33.400 \dashrightarrow 00{:}22{:}36.370$  elevated blood pressure just to name a few.

NOTE Confidence: 0.842742443084717

00:22:36.370 --> 00:22:38.488 With regards to health care services

NOTE Confidence: 0.842742443084717

 $00:22:38.488 \longrightarrow 00:22:40.350$  when they experience weight stigma,

NOTE Confidence: 0.842742443084717

 $00:22:40.350 \longrightarrow 00:22:41.702$  there's poor treatment adherence.

NOTE Confidence: 0.842742443084717

00:22:41.702 --> 00:22:44.330 They don't trust us as health providers,

NOTE Confidence: 0.842742443084717

 $00{:}22{:}44.330 \dashrightarrow 00{:}22{:}45.419$  they avoid it.

NOTE Confidence: 0.842742443084717

 $00:22:45.419 \longrightarrow 00:22:46.508$  Follow up care,

NOTE Confidence: 0.842742443084717

00:22:46.510 --> 00:22:48.495 there's a delay and preventative

 $00:22:48.495 \longrightarrow 00:22:50.083$  health screenings and poor

NOTE Confidence: 0.842742443084717

 $00:22:50.083 \longrightarrow 00:22:51.501$  communication between their physician

NOTE Confidence: 0.842742443084717

 $00{:}22{:}51.501 \dashrightarrow 00{:}22{:}53.748$  an between us and them is patients.

NOTE Confidence: 0.842742443084717

00:22:53.750 --> 00:22:56.638 This, then in turn leads to weight gain,

NOTE Confidence: 0.83505642414093

 $00:22:56.640 \longrightarrow 00:22:58.088$  which then causes psychological

NOTE Confidence: 0.83505642414093

 $00:22:58.088 \longrightarrow 00:22:59.174$  health in distress,

NOTE Confidence: 0.83505642414093

 $00:22:59.180 \longrightarrow 00:23:00.628$  where we see depression,

NOTE Confidence: 0.83505642414093

 $00:23:00.628 \longrightarrow 00:23:02.073$  anxiety, low self esteem,

NOTE Confidence: 0.83505642414093

 $00{:}23{:}02.073 \longrightarrow 00{:}23{:}04.020$  poor body image, substance abuse,

NOTE Confidence: 0.83505642414093

 $00:23:04.020 \longrightarrow 00:23:06.600$  an A high level of suicidality.

NOTE Confidence: 0.83505642414093

 $00:23:06.600 \longrightarrow 00:23:08.418$  Finally, we see physiologic health in

NOTE Confidence: 0.83505642414093

00:23:08.418 --> 00:23:10.490 distress will receive poor glycemic control,

NOTE Confidence: 0.83505642414093

 $00{:}23{:}10.490 \dashrightarrow 00{:}23{:}11.980$  less effective control of chronic

NOTE Confidence: 0.83505642414093

 $00:23:11.980 \longrightarrow 00:23:14.050$  disease with regards to self management,

NOTE Confidence: 0.83505642414093

 $00:23:14.050 \longrightarrow 00:23:15.670$  more advanced in poorly advance

 $00:23:15.670 \longrightarrow 00:23:16.966$  or poorly advanced advanced,

NOTE Confidence: 0.83505642414093

00:23:16.970 --> 00:23:18.908 I guess chronic disease and lower

NOTE Confidence: 0.83505642414093

 $00{:}23{:}18.908 \dashrightarrow 00{:}23{:}20.530$  health related quality of life.

NOTE Confidence: 0.83505642414093

00:23:20.530 --> 00:23:23.114 So this stigma what we say to patients,

NOTE Confidence: 0.83505642414093

00:23:23.120 --> 00:23:24.740 how we're talking about them,

NOTE Confidence: 0.83505642414093

00:23:24.740 --> 00:23:26.360 how we're writing about them,

NOTE Confidence: 0.83505642414093

 $00:23:26.360 \longrightarrow 00:23:28.310$  does indeed lead to worse outcomes.

NOTE Confidence: 0.83505642414093

 $00:23:28.310 \longrightarrow 00:23:32.210$  So I really want us to be mindful of that.

NOTE Confidence: 0.83505642414093

 $00:23:32.210 \longrightarrow 00:23:33.675$  When we're looking at how

NOTE Confidence: 0.83505642414093

 $00:23:33.675 \longrightarrow 00:23:34.847$  we select obesity treatment,

NOTE Confidence: 0.83505642414093

 $00:23:34.850 \longrightarrow 00:23:37.307$  this is kind of just a grid to give

NOTE Confidence: 0.83505642414093

00:23:37.307 --> 00:23:39.540 you kind of how we're doing it.

NOTE Confidence: 0.83505642414093

00:23:39.540 --> 00:23:41.286 If we're using Villamizar primary criteria,

NOTE Confidence: 0.83505642414093

 $00:23:41.290 \longrightarrow 00:23:43.054$  it's important to note that many

NOTE Confidence: 0.83505642414093

 $00:23:43.054 \longrightarrow 00:23:44.809$  people are getting away from this,

NOTE Confidence: 0.83505642414093

 $00:23:44.810 \longrightarrow 00:23:46.502$  including Canada who just released their

00:23:46.502 --> 00:23:48.618 new guidelines for the treatment of obesity,

NOTE Confidence: 0.83505642414093

 $00:23:48.620 \longrightarrow 00:23:50.324$  in which they delete BMI categories

NOTE Confidence: 0.83505642414093

00:23:50.324 --> 00:23:52.428 really and just look at metabolic risk,

NOTE Confidence: 0.83505642414093

 $00:23:52.430 \longrightarrow 00:23:53.315$  which they're using.

NOTE Confidence: 0.83505642414093

00:23:53.315 --> 00:23:54.790 Things such as central adiposity

NOTE Confidence: 0.83505642414093

 $00:23:54.790 \longrightarrow 00:23:55.940$  and things to reflect.

NOTE Confidence: 0.83505642414093

 $00:23:55.940 \longrightarrow 00:23:58.284$  You can see here that across all levels,

NOTE Confidence: 0.83505642414093

00:23:58.290 --> 00:23:59.750 BMI that diet, physical activity,

NOTE Confidence: 0.83505642414093

 $00{:}23{:}59.750 \dashrightarrow 00{:}24{:}01.508$  and behavioral therapy can be utilized,

NOTE Confidence: 0.83505642414093

 $00:24:01.510 \longrightarrow 00:24:03.020$  so that should be the.

NOTE Confidence: 0.83505642414093

 $00:24:03.020 \longrightarrow 00:24:04.496$  Cornerstone of our therapies.

NOTE Confidence: 0.83505642414093

 $00{:}24{:}04.496 \dashrightarrow 00{:}24{:}06.710$  We can begin to introduce pharmacol

NOTE Confidence: 0.83505642414093

 $00{:}24{:}06.774 \dashrightarrow 00{:}24{:}08.279$  the rapy for the treatment of

NOTE Confidence: 0.83505642414093

 $00{:}24{:}08.279 \dashrightarrow 00{:}24{:}10.697$  obesity when we get here to a BMI

NOTE Confidence: 0.83505642414093

00:24:10.697 --> 00:24:12.117 of 27 with comorbid conditions,

 $00:24:12.120 \longrightarrow 00:24:13.745$  which include things like obstructive

NOTE Confidence: 0.83505642414093

00:24:13.745 --> 00:24:14.724 sleep apnea, hypertension,

NOTE Confidence: 0.83505642414093

 $00:24:14.724 \longrightarrow 00:24:16.020$  and Type 2 diabetes.

NOTE Confidence: 0.83505642414093

 $00:24:16.020 \longrightarrow 00:24:17.970$  And then we're looking at metabolic

NOTE Confidence: 0.83505642414093

 $00:24:17.970 \longrightarrow 00:24:18.945$  and bariatric surgery.

NOTE Confidence: 0.83505642414093

00:24:18.950 --> 00:24:20.768 Really looking at those typically at

NOTE Confidence: 0.83505642414093

00:24:20.768 --> 00:24:23.170 the higher end of the weight spectrum,

NOTE Confidence: 0.83505642414093

00:24:23.170 --> 00:24:24.795 American Society of metabolic and

NOTE Confidence: 0.83505642414093

 $00{:}24{:}24.795 \dashrightarrow 00{:}24{:}26.095$  bariatric surgery with encourage

NOTE Confidence: 0.83505642414093

 $00:24:26.095 \longrightarrow 00:24:27.070$  also mild obesity.

NOTE Confidence: 0.83505642414093

 $00{:}24{:}27.070 \dashrightarrow 00{:}24{:}28.732$  But the typical guidelines are the

NOTE Confidence: 0.83505642414093

 $00:24:28.732 \longrightarrow 00:24:30.631$  test answer would be persons that

NOTE Confidence: 0.83505642414093

 $00:24:30.631 \longrightarrow 00:24:32.471$  have moderate obesity with comorbid

NOTE Confidence: 0.83505642414093

 $00{:}24{:}32.471 \dashrightarrow 00{:}24{:}33.930$  conditions as previously noted.

NOTE Confidence: 0.83505642414093

 $00:24:33.930 \longrightarrow 00:24:35.958$  And those that have severe obesity.

NOTE Confidence: 0.83505642414093 00:24:35.960 --> 00:24:36.217 Now,

00:24:36.217 --> 00:24:38.273 do you want to put two stars by

NOTE Confidence: 0.83505642414093

 $00:24:38.273 \longrightarrow 00:24:40.338$  both pharmacol therapy and metabolic

NOTE Confidence: 0.83505642414093

00:24:40.338 --> 00:24:42.508 convergex surgery and indicate to

NOTE Confidence: 0.83505642414093

 $00:24:42.508 \longrightarrow 00:24:44.717$  you that only 2% of patients that

NOTE Confidence: 0.83505642414093

 $00{:}24{:}44.717 \dashrightarrow 00{:}24{:}46.312$  meet criteria for the utilization

NOTE Confidence: 0.83505642414093

00:24:46.312 --> 00:24:47.342 of pharmacotherapy compared

NOTE Confidence: 0.83505642414093

 $00:24:47.342 \longrightarrow 00:24:49.072$  pharmacotherapy for the treatment of

NOTE Confidence: 0.83505642414093

 $00:24:49.072 \longrightarrow 00:24:50.880$  obesity actually receive such therapy?

NOTE Confidence: 0.83505642414093

00:24:50.880 --> 00:24:52.580 Here in the United States,

NOTE Confidence: 0.83505642414093

 $00:24:52.580 \longrightarrow 00:24:55.292$  only 2% that means we are failing at

NOTE Confidence: 0.83505642414093

 $00:24:55.292 \longrightarrow 00:24:57.665$  least 98% of our patients with regards

NOTE Confidence: 0.83505642414093

 $00:24:57.665 \longrightarrow 00:24:59.360$  to metabolic and Barack surgery.

NOTE Confidence: 0.83505642414093

 $00{:}24{:}59.360 \dashrightarrow 00{:}25{:}01.677$  Only 1% of patients that meet criteria

NOTE Confidence: 0.83505642414093

 $00:25:01.677 \longrightarrow 00:25:03.760$  for metabolic emerging surgery receive it,

NOTE Confidence: 0.83505642414093

 $00:25:03.760 \longrightarrow 00:25:06.217$  so the numbers are actually relatively low.

 $00:25:06.220 \longrightarrow 00:25:08.330$  A lot of that I think has to do with

NOTE Confidence: 0.83505642414093

 $00{:}25{:}08.397 \dashrightarrow 00{:}25{:}10.277$  our education and our willingness

NOTE Confidence: 0.83505642414093

00:25:10.277 --> 00:25:12.157 to acknowledge obesity for the

NOTE Confidence: 0.83505642414093

 $00:25:12.222 \longrightarrow 00:25:13.867$  disease that it actually is.

NOTE Confidence: 0.83505642414093

 $00:25:13.870 \longrightarrow 00:25:15.529$  I wanted to take this time to

NOTE Confidence: 0.83505642414093

00:25:15.529 --> 00:25:17.118 spend some time talking about

NOTE Confidence: 0.83505642414093

 $00:25:17.118 \longrightarrow 00:25:18.766$  the weight promoting medications.

NOTE Confidence: 0.83505642414093

00:25:18.770 --> 00:25:20.295 Sometimes people are reticent to

NOTE Confidence: 0.83505642414093

 $00:25:20.295 \longrightarrow 00:25:21.515$  consider anti obesity pharmacotherapy.

NOTE Confidence: 0.83505642414093

00:25:21.520 --> 00:25:23.356 The actual medications to treat obesity,

NOTE Confidence: 0.83505642414093

00:25:23.360 --> 00:25:25.190 but if you're not quite willing

NOTE Confidence: 0.83505642414093

 $00:25:25.190 \longrightarrow 00:25:26.105$  to move there,

NOTE Confidence: 0.83505642414093

00:25:26.110 --> 00:25:28.438 what I would say is maybe if need

NOTE Confidence: 0.83505642414093

 $00:25:28.438 \longrightarrow 00:25:30.128$  be thoughtful about medications that

NOTE Confidence: 0.83505642414093

00:25:30.128 --> 00:25:32.557 are known to cause weight gain so

NOTE Confidence: 0.83505642414093

00:25:32.623 --> 00:25:34.751 you can see here some of the just

00:25:34.751 --> 00:25:36.514 these are just a few representative

NOTE Confidence: 0.83505642414093

00:25:36.514 --> 00:25:37.126 medications antipsychotics,

NOTE Confidence: 0.83505642414093

 $00:25:37.130 \longrightarrow 00:25:38.108$  the answer depressants.

NOTE Confidence: 0.83505642414093

 $00:25:38.108 \longrightarrow 00:25:39.738$  All of our sleep agents,

NOTE Confidence: 0.806577265262604

00:25:39.740 --> 00:25:40.718 basically neuropathic agents,

NOTE Confidence: 0.806577265262604

00:25:40.718 --> 00:25:41.702 beta blockers, spirits,

NOTE Confidence: 0.806577265262604

00:25:41.702 --> 00:25:42.698 insulin, hypoglycemic agents,

NOTE Confidence: 0.806577265262604

00:25:42.698 --> 00:25:45.059 when you can find a more weight

NOTE Confidence: 0.806577265262604

 $00:25:45.059 \longrightarrow 00:25:46.599$  neutral drug within a class.

NOTE Confidence: 0.806577265262604

00:25:46.600 --> 00:25:48.562 That's the goal that you would

NOTE Confidence: 0.806577265262604

00:25:48.562 --> 00:25:50.528 try to utilize. So, for example,

NOTE Confidence: 0.806577265262604

 $00:25:50.528 \longrightarrow 00:25:52.484$  if you're looking at beta blockers,

NOTE Confidence: 0.806577265262604

 $00{:}25{:}52.490 \dashrightarrow 00{:}25{:}54.986$  car vadal all by far is the most

NOTE Confidence: 0.806577265262604

 $00:25:54.986 \longrightarrow 00:25:57.068$  weight neutral of the beta blockers.

NOTE Confidence: 0.806577265262604

 $00:25:57.070 \longrightarrow 00:25:58.705$  All of the beta blockers

00:25:58.705 --> 00:26:00.340 will lead to weight change,

NOTE Confidence: 0.806577265262604

 $00:26:00.340 \longrightarrow 00:26:02.629$  but Corvetto law is the least likely.

NOTE Confidence: 0.806577265262604

 $00:26:02.630 \longrightarrow 00:26:04.260$  For example in that category.

NOTE Confidence: 0.806577265262604

 $00:26:04.260 \longrightarrow 00:26:05.890$  So our strategy of treatment

NOTE Confidence: 0.806577265262604

 $00:26:05.890 \longrightarrow 00:26:07.194$  for looking at weight,

NOTE Confidence: 0.806577265262604

 $00:26:07.200 \longrightarrow 00:26:09.650$  promoting meds as we want to investigate

NOTE Confidence: 0.806577265262604

00:26:09.650 --> 00:26:11.345 whether medications are a likely

NOTE Confidence: 0.806577265262604

 $00:26:11.345 \longrightarrow 00:26:13.109$  source of weight gain and patient.

NOTE Confidence: 0.806577265262604

 $00{:}26{:}13.110 \dashrightarrow 00{:}26{:}14.915$  And if a weight promoting

NOTE Confidence: 0.806577265262604

00:26:14.915 --> 00:26:16.359 medication may be discontinued

NOTE Confidence: 0.806577265262604

 $00{:}26{:}16.359 \dashrightarrow 00{:}26{:}18.388$  when it discontinued that agent,

NOTE Confidence: 0.806577265262604

 $00:26:18.390 \longrightarrow 00:26:20.270$  and if we can't consider

NOTE Confidence: 0.806577265262604

 $00:26:20.270 \longrightarrow 00:26:21.774$  or discontinue that agents,

NOTE Confidence: 0.806577265262604

 $00:26:21.780 \longrightarrow 00:26:23.748$  we do want to use consider the use

NOTE Confidence: 0.806577265262604

00:26:23.748 --> 00:26:25.253 of anti obesity pharmacotherapy

NOTE Confidence: 0.806577265262604

 $00:26:25.253 \longrightarrow 00:26:28.103$  for weight loss in conjunction with

 $00:26:28.103 \longrightarrow 00:26:29.700$  appropriate lifestyle therapies.

NOTE Confidence: 0.806577265262604

 $00:26:29.700 \longrightarrow 00:26:32.339$  So now let's look at these anti

NOTE Confidence: 0.806577265262604

 $00:26:32.339 \longrightarrow 00:26:33.470$  obesity pharmacotherapy agents.

NOTE Confidence: 0.806577265262604

00:26:33.470 --> 00:26:35.355 Even as someone who's completed

NOTE Confidence: 0.806577265262604

00:26:35.355 --> 00:26:37.240 a three year obesity Fellowship,

NOTE Confidence: 0.806577265262604

00:26:37.240 --> 00:26:39.496 Pyrdum GH had a strong interest

NOTE Confidence: 0.806577265262604

 $00:26:39.496 \longrightarrow 00:26:40.624$  in obesity medicine.

NOTE Confidence: 0.806577265262604

 $00:26:40.630 \longrightarrow 00:26:43.646$  I did not learn about these in residency,

NOTE Confidence: 0.806577265262604 00:26:43.650 --> 00:26:44.426 so hopefully.

NOTE Confidence: 0.806577265262604

 $00:26:44.426 \longrightarrow 00:26:46.754$  For those of you who aren't

NOTE Confidence: 0.806577265262604

 $00:26:46.754 \longrightarrow 00:26:48.320$  already untrained in obesity,

NOTE Confidence: 0.806577265262604

 $00:26:48.320 \longrightarrow 00:26:50.636$  these would be maybe knew or

NOTE Confidence: 0.806577265262604

 $00{:}26{:}50.636 \dashrightarrow 00{:}26{:}52.180$  kind of new information.

NOTE Confidence: 0.806577265262604

 $00{:}26{:}52.180 \dashrightarrow 00{:}26{:}54.105$  Most agents can be characterized

NOTE Confidence: 0.806577265262604

 $00:26:54.105 \longrightarrow 00:26:55.645$  into three primary groups,

 $00:26:55.650 \longrightarrow 00:26:57.580$  those that are centrally acting

NOTE Confidence: 0.806577265262604

00:26:57.580 --> 00:26:59.124 than pure dietary intake.

NOTE Confidence: 0.806577265262604

00:26:59.130 --> 00:27:01.055 Through those attack more peripherally

NOTE Confidence: 0.806577265262604

 $00:27:01.055 \longrightarrow 00:27:02.595$  to impair diety reabsorption,

NOTE Confidence: 0.806577265262604

 $00:27:02.600 \longrightarrow 00:27:04.540$  and then those that may

NOTE Confidence: 0.806577265262604

 $00:27:04.540 \longrightarrow 00:27:05.704$  increase energy expenditure.

NOTE Confidence: 0.806577265262604

 $00:27:05.710 \longrightarrow 00:27:07.929$  There is one that has been removed.

NOTE Confidence: 0.806577265262604

 $00:27:07.930 \longrightarrow 00:27:10.149$  I'll talk about that in a second,

NOTE Confidence: 0.806577265262604

 $00{:}27{:}10.150 \dashrightarrow 00{:}27{:}12.046$  but these were the FDA approved

NOTE Confidence: 0.806577265262604

 $00:27:12.046 \longrightarrow 00:27:12.994$  medications currently available.

NOTE Confidence: 0.806577265262604

 $00{:}27{:}13.000 \dashrightarrow 00{:}27{:}15.504$  The ones that have stars by them that

NOTE Confidence: 0.806577265262604

 $00:27:15.504 \longrightarrow 00:27:17.697$  you'll know those are approved by the

NOTE Confidence: 0.806577265262604

 $00:27:17.697 \longrightarrow 00:27:20.290$  FDA for long term use for the chronic,

NOTE Confidence: 0.806577265262604

00:27:20.290 --> 00:27:21.238 relapsing remitting progressive

NOTE Confidence: 0.806577265262604

 $00:27:21.238 \longrightarrow 00:27:22.186$  disease of obesity.

NOTE Confidence: 0.806577265262604

 $00:27:22.190 \longrightarrow 00:27:24.582$  So those ones that have stars by them

 $00:27:24.582 \longrightarrow 00:27:26.946$  were proved starting in 2012 and beyond.

NOTE Confidence: 0.806577265262604

 $00:27:26.950 \longrightarrow 00:27:28.218$  Anything that predates that,

NOTE Confidence: 0.806577265262604

 $00:27:28.218 \longrightarrow 00:27:29.169$  including Fenter mean,

NOTE Confidence: 0.806577265262604 00:27:29.170 --> 00:27:29.882 for example,

NOTE Confidence: 0.806577265262604

 $00{:}27{:}29.882 \dashrightarrow 00{:}27{:}32.018$  which is the medication that was

NOTE Confidence: 0.806577265262604

00:27:32.018 --> 00:27:33.611 first approved for the treatment

NOTE Confidence: 0.806577265262604

 $00:27:33.611 \longrightarrow 00:27:35.880$  of obesity in the US back in 1959.

NOTE Confidence: 0.806577265262604

 $00:27:35.880 \longrightarrow 00:27:38.868$  None of those are approved for long term use.

NOTE Confidence: 0.806577265262604

 $00:27:38.870 \longrightarrow 00:27:39.584$  Interestingly enough,

NOTE Confidence: 0.806577265262604

 $00:27:39.584 \longrightarrow 00:27:42.083$  you can see that phentram in into pure

NOTE Confidence: 0.806577265262604

 $00:27:42.083 \longrightarrow 00:27:44.505$  mating combos approved a long term suit you,

NOTE Confidence: 0.806577265262604

 $00:27:44.510 \longrightarrow 00:27:46.582$  so maybe the FDA should reconsider how

NOTE Confidence: 0.806577265262604

 $00{:}27{:}46.582 \dashrightarrow 00{:}27{:}48.499$  they think about these medications.

NOTE Confidence: 0.806577265262604

 $00:27:48.500 \longrightarrow 00:27:50.943$  One drive has been with drawn with them

NOTE Confidence: 0.806577265262604

 $00:27:50.943 \longrightarrow 00:27:53.477$  from the market as early as this year,

 $00:27:53.480 \longrightarrow 00:27:55.466$  or at least later this year.

NOTE Confidence: 0.806577265262604

 $00:27:55.470 \longrightarrow 00:27:56.925$  I'm sorry and that forecast

NOTE Confidence: 0.806577265262604

 $00:27:56.925 \longrightarrow 00:27:59.574$  and it was a 5 HT 2C inhibitor

NOTE Confidence: 0.806577265262604

 $00:27:59.574 \longrightarrow 00:28:01.439$  for those that were around.

NOTE Confidence: 0.806577265262604

 $00:28:01.440 \longrightarrow 00:28:03.407$  And remember the Finn Finn era there

NOTE Confidence: 0.806577265262604

 $00:28:03.407 \longrightarrow 00:28:05.486$  was finter mean which was combined

NOTE Confidence: 0.806577265262604

 $00:28:05.486 \longrightarrow 00:28:07.446$  with fenfluramine that was FENFLURAMIN.

NOTE Confidence: 0.806577265262604

00:28:07.450 --> 00:28:09.816 That was a 5 HT 2B Receptor,

NOTE Confidence: 0.806577265262604

 $00:28:09.820 \longrightarrow 00:28:11.980$  So what they tried to do was come

NOTE Confidence: 0.806577265262604

00:28:11.980 --> 00:28:14.625 up with the five HT 2C Receptor

NOTE Confidence: 0.806577265262604

 $00{:}28{:}14.625 \dashrightarrow 00{:}28{:}16.257$  because that combination of

NOTE Confidence: 0.806577265262604

 $00:28:16.257 \longrightarrow 00:28:18.022$  Phentramin and conforming was such

NOTE Confidence: 0.806577265262604

00:28:18.022 --> 00:28:20.281 a great combo in terms of weight,

NOTE Confidence: 0.806577265262604

 $00:28:20.281 \longrightarrow 00:28:21.886$  but not the degree comment

NOTE Confidence: 0.806577265262604

 $00:28:21.886 \longrightarrow 00:28:23.670$  combo in terms of Health,

NOTE Confidence: 0.806577265262604

 $00:28:23.670 \longrightarrow 00:28:25.914$  it caused heart valvulopathy this was

 $00:28:25.914 \longrightarrow 00:28:28.056$  withdrawn for the presumption that this

NOTE Confidence: 0.806577265262604

 $00{:}28{:}28.056 \dashrightarrow 00{:}28{:}30.100$  may cause an increase in cancer risk.

NOTE Confidence: 0.806577265262604

 $00:28:30.100 \longrightarrow 00:28:31.906$  When you looked at the studies

NOTE Confidence: 0.806577265262604

 $00:28:31.906 \longrightarrow 00:28:33.110$  when they were looking

NOTE Confidence: 0.841190814971924

 $00:28:33.167 \longrightarrow 00:28:35.547$  at Post hoc analysis of those individuals

NOTE Confidence: 0.841190814971924

 $00:28:35.547 \longrightarrow 00:28:37.539$  that had undergone clinical trials.

NOTE Confidence: 0.841190814971924

 $00:28:37.540 \longrightarrow 00:28:40.039$  The persons that were on location 7.6%

NOTE Confidence: 0.841190814971924

 $00:28:40.040 \longrightarrow 00:28:42.539$  of them developed some type of cancer,

NOTE Confidence: 0.841190814971924

 $00:28:42.540 \longrightarrow 00:28:43.968$  whereas those that were

NOTE Confidence: 0.841190814971924

 $00:28:43.968 \longrightarrow 00:28:46.110$  not on low caster in 7.0%.

NOTE Confidence: 0.841190814971924

00:28:46.110 --> 00:28:48.315 So there's a little bit of discrepancy

NOTE Confidence: 0.841190814971924

 $00:28:48.315 \longrightarrow 00:28:50.955$  as to whether or not it was

NOTE Confidence: 0.841190814971924

 $00{:}28{:}50.955 \dashrightarrow 00{:}28{:}52.176$  really statistically significant,

NOTE Confidence: 0.841190814971924

 $00:28:52.180 \longrightarrow 00:28:55.036$  but I think because of caution FDA did

NOTE Confidence: 0.841190814971924

 $00:28:55.036 \longrightarrow 00:28:57.886$  ask them to move that from the list.

 $00:28:57.890 \longrightarrow 00:29:00.382$  You can see we have CNS stimulants

NOTE Confidence: 0.841190814971924

 $00:29:00.382 \longrightarrow 00:29:01.094$  and Anorexia.

NOTE Confidence: 0.841190814971924

 $00:29:01.100 \longrightarrow 00:29:02.528$  It's into depressants and

NOTE Confidence: 0.841190814971924

00:29:02.528 --> 00:29:03.599 dopamine reuptake Inhibitors,

NOTE Confidence: 0.841190814971924

 $00:29:03.600 \longrightarrow 00:29:05.036$  along with opioid antagonists.

NOTE Confidence: 0.841190814971924

 $00:29:05.036 \longrightarrow 00:29:06.831$  And then finally our GI

NOTE Confidence: 0.841190814971924

 $00:29:06.831 \longrightarrow 00:29:08.259$  agents such as Orlistat.

NOTE Confidence: 0.841190814971924

 $00:29:08.260 \longrightarrow 00:29:10.240$  And our GOP one agonists like

NOTE Confidence: 0.841190814971924

 $00{:}29{:}10.240 \dashrightarrow 00{:}29{:}11.560$  Liraglutide Horse extended the

NOTE Confidence: 0.841190814971924

00:29:11.618 --> 00:29:13.268 treatment dose to 3 milligrams

NOTE Confidence: 0.841190814971924

 $00{:}29{:}13.268 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}29{:}14.918$  for the treatment of obesity.

NOTE Confidence: 0.841190814971924

 $00:29:14.920 \longrightarrow 00:29:16.660$  Other agents that docs may use

NOTE Confidence: 0.841190814971924

 $00:29:16.660 \longrightarrow 00:29:19.013$  you seen some of these in the

NOTE Confidence: 0.841190814971924

00:29:19.013 --> 00:29:20.517 previous slide in combination

NOTE Confidence: 0.841190814971924

 $00:29:20.517 \longrightarrow 00:29:22.579$  with certain drugs such as tapir,

NOTE Confidence: 0.841190814971924

 $00:29:22.580 \longrightarrow 00:29:24.911$  mating soon as my both for Witcher

 $00{:}29{:}24.911 \dashrightarrow 00{:}29{:}25.577$  anticonvulsants bupropion,

NOTE Confidence: 0.841190814971924

00:29:25.580 --> 00:29:27.694 which many of us know and probably

NOTE Confidence: 0.841190814971924

 $00:29:27.694 \longrightarrow 00:29:29.598$  are more familiar with for the

NOTE Confidence: 0.841190814971924

00:29:29.598 --> 00:29:30.850 treatment of either depression

NOTE Confidence: 0.841190814971924

 $00:29:30.850 \longrightarrow 00:29:32.900$  and or for smoking cessation.

NOTE Confidence: 0.841190814971924

 $00:29:32.900 \longrightarrow 00:29:34.232$  Metformin or amulet agonists

NOTE Confidence: 0.841190814971924

00:29:34.232 --> 00:29:35.564 in RSG LT2 inhibitors.

NOTE Confidence: 0.841190814971924

 $00:29:35.570 \longrightarrow 00:29:38.090$  which of course are utilized for

NOTE Confidence: 0.841190814971924

 $00{:}29{:}38.090 \dashrightarrow 00{:}29{:}40.709$  the treatment of type 2 diabetes.

NOTE Confidence: 0.841190814971924

00:29:40.710 --> 00:29:41.994 The criteria for metabolic

NOTE Confidence: 0.841190814971924

 $00:29:41.994 \longrightarrow 00:29:42.957$  and bariatric surgery.

NOTE Confidence: 0.841190814971924

 $00:29:42.960 \longrightarrow 00:29:45.214$  Just a reminder, won't belabor this point.

NOTE Confidence: 0.841190814971924

 $00:29:45.220 \longrightarrow 00:29:47.467$  BMI greater than or equal to 40,

NOTE Confidence: 0.841190814971924

 $00:29:47.470 \longrightarrow 00:29:49.080$  so those have severe obesity.

NOTE Confidence: 0.841190814971924

00:29:49.080 --> 00:29:51.006 BMI of 35 to 30 point,

00:29:51.010 --> 00:29:52.948 9.9 with a serious comorbid condition,

NOTE Confidence: 0.841190814971924

 $00{:}29{:}52.950 \dashrightarrow 00{:}29{:}54.876$  and then it's important to know.

NOTE Confidence: 0.841190814971924

00:29:54.880 --> 00:29:57.778 Kind of this next bullet so the main bullet,

NOTE Confidence: 0.841190814971924

 $00:29:57.780 \longrightarrow 00:29:58.743$  three prior unsuccessful

NOTE Confidence: 0.841190814971924

 $00:29:58.743 \longrightarrow 00:29:59.706$  weight loss attempts.

NOTE Confidence: 0.841190814971924

 $00:29:59.710 \longrightarrow 00:30:01.480$  So we don't just send people

NOTE Confidence: 0.841190814971924

 $00:30:01.480 \longrightarrow 00:30:03.039$  to surgery because they meet

NOTE Confidence: 0.841190814971924

00:30:03.039 --> 00:30:04.947 criteria we want to first try

NOTE Confidence: 0.841190814971924

00:30:04.947 --> 00:30:06.470 are more conservative measures,

NOTE Confidence: 0.841190814971924

 $00:30:06.470 \longrightarrow 00:30:08.598$  but if they are continuing to have

NOTE Confidence: 0.841190814971924

 $00:30:08.598 \dashrightarrow 00:30:10.979$  resistance in terms of their body responding.

NOTE Confidence: 0.841190814971924

 $00:30:10.980 \longrightarrow 00:30:13.311$  We do want to use the appropriate

NOTE Confidence: 0.841190814971924

 $00:30:13.311 \dashrightarrow 00:30:15.823$  treatment tool and we do know is the

NOTE Confidence: 0.841190814971924

00:30:15.823 --> 00:30:18.080 best tool for the treatment of obesity

NOTE Confidence: 0.841190814971924

 $00:30:18.080 \longrightarrow 00:30:19.940$  anywhere in the world currently

NOTE Confidence: 0.841190814971924

 $00{:}30{:}19.940 \dashrightarrow 00{:}30{:}21.732$  is metabolic in Berwick surgery.

 $00:30:21.732 \longrightarrow 00:30:23.412$  You can see acceptable operative

NOTE Confidence: 0.841190814971924

 $00:30:23.412 \longrightarrow 00:30:24.420$  risk is important,

NOTE Confidence: 0.841190814971924

 $00:30:24.420 \longrightarrow 00:30:26.135$  the ability to producing treatment

NOTE Confidence: 0.841190814971924

 $00:30:26.135 \longrightarrow 00:30:28.222$  and long-term following an ability to

NOTE Confidence: 0.841190814971924

 $00:30:28.222 \longrightarrow 00:30:29.797$  understand that this their success,

NOTE Confidence: 0.841190814971924

 $00:30:29.800 \longrightarrow 00:30:31.364$  significant lifestyle changes that

NOTE Confidence: 0.841190814971924

 $00:30:31.364 \longrightarrow 00:30:33.710$  are necessary for the life course.

NOTE Confidence: 0.841190814971924

00:30:33.710 --> 00:30:35.439 It's important to know that your notes

NOTE Confidence: 0.841190814971924

 $00{:}30{:}35.439 \to 00{:}30{:}37.220$  also when you're working with patients.

NOTE Confidence: 0.841190814971924

 $00{:}30{:}37.220 \dashrightarrow 00{:}30{:}38.954$  The most common procedures that are

NOTE Confidence: 0.841190814971924

 $00:30:38.954 \longrightarrow 00:30:40.997$  performed here in the USI do want to

NOTE Confidence: 0.841190814971924

 $00:30:40.997 \longrightarrow 00:30:43.159$  let you know that the most common procedure,

NOTE Confidence: 0.841190814971924 00:30:43.160 --> 00:30:43.700 hands down,

NOTE Confidence: 0.841190814971924

 $00:30:43.700 \longrightarrow 00:30:45.320$  is the Sleekest recta me almost

NOTE Confidence: 0.841190814971924

 $00:30:45.320 \longrightarrow 00:30:47.240$  70% of all cases performed in the

 $00:30:47.240 \longrightarrow 00:30:48.914$  United States now are the sleep

NOTE Confidence: 0.841190814971924

 $00{:}30{:}48.914 \dashrightarrow 00{:}30{:}50.720$  distract me and you can see here.

NOTE Confidence: 0.841190814971924

 $00:30:50.720 \longrightarrow 00:30:52.340$  I'm a large portion of the

NOTE Confidence: 0.841190814971924

 $00:30:52.340 \longrightarrow 00:30:53.150$  stomach is removed.

NOTE Confidence: 0.841190814971924

 $00:30:53.150 \longrightarrow 00:30:54.854$  A lot of people call these both restrictive

NOTE Confidence: 0.841190814971924

 $00:30:54.854 \longrightarrow 00:30:56.390$  and or malabsorptive procedures,

NOTE Confidence: 0.841190814971924

 $00:30:56.390 \longrightarrow 00:30:58.010$  and that is not the primary

NOTE Confidence: 0.841190814971924

 $00:30:58.010 \longrightarrow 00:30:59.360$  mechanism by how these act.

NOTE Confidence: 0.841190814971924

00:30:59.360 --> 00:31:01.215 If you can remember when we talked

NOTE Confidence: 0.841190814971924

00:31:01.215 --> 00:31:02.600 about hormones such as ghrelin,

NOTE Confidence: 0.841190814971924

 $00{:}31{:}02.600 \dashrightarrow 00{:}31{:}04.130$  which we know is housed here

NOTE Confidence: 0.841190814971924

 $00:31:04.130 \longrightarrow 00:31:05.889$  in the fundus of the stomach.

NOTE Confidence: 0.841190814971924

 $00:31:05.890 \longrightarrow 00:31:07.415$  Removing this portion of the

NOTE Confidence: 0.841190814971924

 $00{:}31{:}07.415 \dashrightarrow 00{:}31{:}08.635$  stomach then reduces grilling.

NOTE Confidence: 0.841190814971924

00:31:08.640 --> 00:31:10.170 It reduces hunger for example,

NOTE Confidence: 0.841190814971924

 $00:31:10.170 \longrightarrow 00:31:11.875$  especially in that immediate postoperative

 $00:31:11.875 \longrightarrow 00:31:13.580$  course and the postoperative course

NOTE Confidence: 0.841190814971924

 $00:31:13.626 \longrightarrow 00:31:15.066$  that lasted till about 12 months.

NOTE Confidence: 0.803509831428528

 $00:31:15.070 \longrightarrow 00:31:16.600$  Those hormones can then resume.

NOTE Confidence: 0.803509831428528

00:31:16.600 --> 00:31:18.436 Remember they were also pregnant president,

NOTE Confidence: 0.803509831428528

 $00:31:18.440 \longrightarrow 00:31:19.965$  for example, grilling in the

NOTE Confidence: 0.803509831428528

 $00:31:19.965 \longrightarrow 00:31:21.185$  neurons in the hypothalamus.

NOTE Confidence: 0.803509831428528

00:31:21.190 --> 00:31:23.638 So, but this is the most common procedure.

NOTE Confidence: 0.803509831428528

 $00{:}31{:}23.640 {\:{\circ}{\circ}{\circ}}>00{:}31{:}25.350$  It's important for us to know

NOTE Confidence: 0.803509831428528

 $00{:}31{:}25.350 \dashrightarrow 00{:}31{:}26.844$  which procedures being done because

NOTE Confidence: 0.803509831428528

 $00:31:26.844 \longrightarrow 00:31:28.319$  the side effect profile does

NOTE Confidence: 0.803509831428528

 $00:31:28.319 \longrightarrow 00:31:30.060$  vary for the different surgeries,

NOTE Confidence: 0.803509831428528

 $00:31:30.060 \longrightarrow 00:31:32.013$  so make sure when you're either referring

NOTE Confidence: 0.803509831428528

 $00{:}31{:}32.013 \dashrightarrow 00{:}31{:}34.039$  out or are getting referrals in.

NOTE Confidence: 0.803509831428528

 $00:31:34.040 \longrightarrow 00:31:36.238$  That's been correctly noted in the chart.

NOTE Confidence: 0.803509831428528

 $00:31:36.240 \longrightarrow 00:31:37.119$  I'm the room.

 $00:31:37.119 \longrightarrow 00:31:39.955$  I gastric bypass is still by far the most

NOTE Confidence: 0.803509831428528

 $00{:}31{:}39.955 \dashrightarrow 00{:}31{:}42.103$  efficacious in terms of weight loss.

NOTE Confidence: 0.803509831428528

00:31:42.110 --> 00:31:43.740 Comparing the two does have

NOTE Confidence: 0.803509831428528

 $00:31:43.740 \longrightarrow 00:31:44.718$  a significant difference.

NOTE Confidence: 0.803509831428528

00:31:44.720 --> 00:31:46.676 I guess side effect profile in

NOTE Confidence: 0.803509831428528

00:31:46.676 --> 00:31:47.980 terms of dumping syndrome.

NOTE Confidence: 0.803509831428528

 $00:31:47.980 \longrightarrow 00:31:48.632$  For example,

NOTE Confidence: 0.803509831428528

 $00:31:48.632 \longrightarrow 00:31:50.262$  if you need something that's

NOTE Confidence: 0.803509831428528

 $00:31:50.262 \longrightarrow 00:31:51.240$  sweet or concentrated,

NOTE Confidence: 0.803509831428528

00:31:51.240 --> 00:31:53.840 sweet feeling like you're going to pass out,

NOTE Confidence: 0.803509831428528

 $00{:}31{:}53.840 \dashrightarrow 00{:}31{:}56.424$  you can see that you by pass a large

NOTE Confidence: 0.803509831428528

 $00:31:56.424 \longrightarrow 00:31:59.213$  portion of the stomach an the proximal

NOTE Confidence: 0.803509831428528

 $00:31:59.213 \longrightarrow 00:32:01.283$  portion of the small intestine.

NOTE Confidence: 0.803509831428528

 $00:32:01.290 \longrightarrow 00:32:03.290$  So I'm going to go into a few

NOTE Confidence: 0.803509831428528

 $00:32:03.290 \longrightarrow 00:32:05.166$  cases just to see how this works

NOTE Confidence: 0.803509831428528

00:32:05.166 --> 00:32:07.110 in real life with my patients,

 $00:32:07.110 \longrightarrow 00:32:08.839$  because a lot of this is kind

NOTE Confidence: 0.803509831428528

 $00:32:08.839 \longrightarrow 00:32:10.710$  of just like facts and figures.

NOTE Confidence: 0.803509831428528

00:32:10.710 --> 00:32:12.378 It doesn't really mean anything until

NOTE Confidence: 0.803509831428528

 $00:32:12.378 \longrightarrow 00:32:14.588$  we see how it works in real life.

NOTE Confidence: 0.803509831428528

 $00:32:14.590 \longrightarrow 00:32:16.734$  So I'm going to present a few of

NOTE Confidence: 0.803509831428528

00:32:16.734 --> 00:32:18.948 my patients and then open it up for

NOTE Confidence: 0.803509831428528

 $00:32:18.948 \longrightarrow 00:32:21.213$  questions so we have a 54 year old

NOTE Confidence: 0.803509831428528

 $00{:}32{:}21.213 \dashrightarrow 00{:}32{:}23.177$  woman here that's coming in with the

NOTE Confidence: 0.803509831428528

00:32:23.177 --> 00:32:24.562 past medical history of untreated

NOTE Confidence: 0.803509831428528

 $00:32:24.562 \longrightarrow 00:32:25.392$  hypertension, migraine headaches.

NOTE Confidence: 0.803509831428528

00:32:25.392 --> 00:32:26.496 Gastroesophageal reflux is these

NOTE Confidence: 0.803509831428528

00:32:26.496 --> 00:32:27.324 IDs metabolic syndrome.

NOTE Confidence: 0.803509831428528

 $00{:}32{:}27.330 \dashrightarrow 00{:}32{:}28.905$  She tells me she's retained 20 pounds

NOTE Confidence: 0.803509831428528

 $00:32:28.905 \longrightarrow 00:32:30.930$  with each of virtue president pregnancies.

NOTE Confidence: 0.803509831428528

 $00:32:30.930 \longrightarrow 00:32:32.550$  So like 40 pounds up from

 $00:32:32.550 \longrightarrow 00:32:33.980$  what her baseline was free.

NOTE Confidence: 0.803509831428528

 $00:32:33.980 \longrightarrow 00:32:34.544$  Having children,

NOTE Confidence: 0.803509831428528

 $00:32:34.544 \longrightarrow 00:32:35.672$  she's tried many commercial

NOTE Confidence: 0.803509831428528

 $00:32:35.672 \longrightarrow 00:32:37.279$  programs which led to 20 pounds.

NOTE Confidence: 0.803509831428528

 $00:32:37.280 \longrightarrow 00:32:39.198$  That seems to be the magic number

NOTE Confidence: 0.803509831428528

 $00:32:39.198 \longrightarrow 00:32:40.310$  of unsustainable weight loss.

NOTE Confidence: 0.803509831428528

00:32:40.310 --> 00:32:41.955 Each attempt she tells me, hey,

NOTE Confidence: 0.803509831428528

00:32:41.955 --> 00:32:43.880 you know I lost some significant weight,

NOTE Confidence: 0.803509831428528

 $00:32:43.880 \longrightarrow 00:32:45.744$  but that Finn Finn back in the 90s

NOTE Confidence: 0.803509831428528

 $00:32:45.744 \longrightarrow 00:32:47.770$  I lost £50 over the course of six

NOTE Confidence: 0.803509831428528

 $00{:}32{:}47.770 \dashrightarrow 00{:}32{:}49.820$  months and so she comes into me

NOTE Confidence: 0.803509831428528

 $00:32:49.820 \longrightarrow 00:32:51.470$  interested in weight loss medications

NOTE Confidence: 0.803509831428528

 $00:32:51.470 \longrightarrow 00:32:52.712$  and in behavioral therapies.

NOTE Confidence: 0.803509831428528

 $00:32:52.712 \longrightarrow 00:32:55.040$  So I'm going to show you her graph

NOTE Confidence: 0.803509831428528

 $00:32:55.096 \longrightarrow 00:32:56.800$  and I wanted to just take a little

NOTE Confidence: 0.803509831428528

 $00:32:56.800 \longrightarrow 00:32:58.553$  bit of time explaining what you're

 $00:32:58.553 \longrightarrow 00:32:59.825$  seeing on the screen.

NOTE Confidence: 0.803509831428528

 $00:32:59.830 \longrightarrow 00:33:01.692$  Here we have this weight in pounds

NOTE Confidence: 0.803509831428528

00:33:01.692 --> 00:33:03.937 on this axis and we have BMI which

NOTE Confidence: 0.803509831428528

 $00:33:03.937 \longrightarrow 00:33:05.322$  stands for body mass index.

NOTE Confidence: 0.803509831428528

 $00:33:05.330 \longrightarrow 00:33:06.800$  Of course on this axis.

NOTE Confidence: 0.803509831428528

 $00:33:06.800 \longrightarrow 00:33:08.150$  And then we have time.

NOTE Confidence: 0.803509831428528

 $00:33:08.150 \longrightarrow 00:33:10.562$  So you get a sense of what's going on.

NOTE Confidence: 0.803509831428528

 $00{:}33{:}10.570 \dashrightarrow 00{:}33{:}12.131$  Notice how if you're looking at a

NOTE Confidence: 0.803509831428528

00:33:12.131 --> 00:33:13.909 graph at 20 pounds that she tells

NOTE Confidence: 0.803509831428528

 $00:33:13.909 \longrightarrow 00:33:15.869$  me she keeps losing and gaining that

NOTE Confidence: 0.803509831428528

 $00:33:15.869 \longrightarrow 00:33:17.825$  actually happens and it happens overtime.

NOTE Confidence: 0.803509831428528

 $00:33:17.830 \longrightarrow 00:33:20.520$  But she comes into me with a BMI of 40,

NOTE Confidence: 0.803509831428528

 $00{:}33{:}20.520 \dashrightarrow 00{:}33{:}21.860$  so she's definitely coming into

NOTE Confidence: 0.803509831428528

 $00:33:21.860 \longrightarrow 00:33:22.932$  me with severe obesity.

NOTE Confidence: 0.803509831428528

 $00{:}33{:}22.940 \dashrightarrow 00{:}33{:}24.404$  You could may be recall what she

 $00:33:24.404 \longrightarrow 00:33:26.169$  told me she was interested in,

NOTE Confidence: 0.803509831428528

 $00:33:26.170 \longrightarrow 00:33:28.314$  and notice she did have a pretty levely

NOTE Confidence: 0.803509831428528

 $00:33:28.314 \longrightarrow 00:33:30.466$  response. She comes down to BMI of 31.

NOTE Confidence: 0.803509831428528

 $00:33:30.470 \longrightarrow 00:33:32.090$  If I were there in person,

NOTE Confidence: 0.803509831428528

00:33:32.090 --> 00:33:34.138 I'd ask you what happened and you lies

NOTE Confidence: 0.803509831428528

 $00:33:34.138 \longrightarrow 00:33:35.848$  will respond with a resounding she

NOTE Confidence: 0.803509831428528

 $00:33:35.848 \longrightarrow 00:33:37.564$  had surgery because I just finished

NOTE Confidence: 0.803509831428528

00:33:37.620 --> 00:33:39.377 talking about that and I would say.

NOTE Confidence: 0.828991651535034

 $00:33:39.380 \longrightarrow 00:33:40.271$  That makes sense,

NOTE Confidence: 0.828991651535034

 $00:33:40.271 \longrightarrow 00:33:42.053$  but that was not what happened.

NOTE Confidence: 0.828991651535034

 $00:33:42.060 \longrightarrow 00:33:44.188$  She participate in our twelve week program

NOTE Confidence: 0.828991651535034

 $00:33:44.188 \longrightarrow 00:33:45.940$  here called healthy habits for life.

NOTE Confidence: 0.828991651535034

 $00:33:45.940 \longrightarrow 00:33:47.430$  It's run by or dietitians.

NOTE Confidence: 0.828991651535034

00:33:47.430 --> 00:33:49.285 I was indeed as astonished as you

NOTE Confidence: 0.828991651535034

00:33:49.285 --> 00:33:51.459 probably are looking at this being her

NOTE Confidence: 0.828991651535034

 $00:33:51.459 \longrightarrow 00:33:52.783$  response to behavioral modification,

00:33:52.790 --> 00:33:54.275 because this differs so drastically

NOTE Confidence: 0.828991651535034

00:33:54.275 --> 00:33:55.463 from her attempts previously,

NOTE Confidence: 0.828991651535034

 $00:33:55.470 \longrightarrow 00:33:57.521$  and that program we do not teach

NOTE Confidence: 0.828991651535034

00:33:57.521 --> 00:33:59.052 anything about calorie counting or

NOTE Confidence: 0.828991651535034

00:33:59.052 --> 00:34:01.124 point counting or any of these things.

NOTE Confidence: 0.828991651535034

 $00:34:01.130 \longrightarrow 00:34:02.828$  We teach things such as volume

NOTE Confidence: 0.828991651535034

 $00:34:02.828 \longrightarrow 00:34:04.327$  metrics like what foods are

NOTE Confidence: 0.828991651535034

 $00:34:04.327 \longrightarrow 00:34:05.897$  going to improve hunger satiety,

NOTE Confidence: 0.828991651535034

00:34:05.900 --> 00:34:07.986 how not to hyper focus on things

NOTE Confidence: 0.828991651535034

 $00:34:07.986 \longrightarrow 00:34:09.920$  such as calories, and so this did.

NOTE Confidence: 0.828991651535034

 $00:34:09.920 \longrightarrow 00:34:11.220$  Make a huge difference for

NOTE Confidence: 0.828991651535034

 $00:34:11.220 \longrightarrow 00:34:12.569$  this particular patient.

NOTE Confidence: 0.828991651535034

 $00{:}34{:}12.570 --> 00{:}34{:}14.376$  What I want you to notice

NOTE Confidence: 0.828991651535034

00:34:14.376 --> 00:34:15.580 that the patient stabilizes,

NOTE Confidence: 0.828991651535034

 $00:34:15.580 \longrightarrow 00:34:17.380$  which is exactly what we do.

 $00:34:17.380 \longrightarrow 00:34:18.885$  Many patients will reach their

NOTE Confidence: 0.828991651535034

 $00:34:18.885 \longrightarrow 00:34:20.089$  nadir with either behavior,

NOTE Confidence: 0.828991651535034

 $00:34:20.090 \longrightarrow 00:34:21.095$  medication or surgery,

NOTE Confidence: 0.828991651535034

 $00:34:21.095 \longrightarrow 00:34:23.756$  and then they'll begin to rebound back as

NOTE Confidence: 0.828991651535034

 $00:34:23.756 \longrightarrow 00:34:25.804$  the body tries to defend its set point.

NOTE Confidence: 0.828991651535034

 $00:34:25.810 \longrightarrow 00:34:27.315$  But notice she began to

NOTE Confidence: 0.828991651535034

00:34:27.315 --> 00:34:28.820 continue to trickle down here,

NOTE Confidence: 0.828991651535034

00:34:28.820 --> 00:34:31.228 and that was when I added an phentramin,

NOTE Confidence: 0.828991651535034

 $00:34:31.230 \longrightarrow 00:34:33.204$  which I told you is the drug

NOTE Confidence: 0.828991651535034

 $00:34:33.204 \longrightarrow 00:34:34.840$  that's been around the longest.

NOTE Confidence: 0.828991651535034

 $00:34:34.840 \longrightarrow 00:34:36.658$  Notice how she comes down here

NOTE Confidence: 0.828991651535034

 $00:34:36.658 \longrightarrow 00:34:38.450$  and then rebounds just a smidge,

NOTE Confidence: 0.828991651535034

 $00:34:38.450 \longrightarrow 00:34:40.586$  but stabilizes and BMI of about 28.5 and

NOTE Confidence: 0.828991651535034

 $00:34:40.586 \longrightarrow 00:34:42.670$  then notice using another downward trend.

NOTE Confidence: 0.828991651535034

 $00:34:42.670 \longrightarrow 00:34:45.166$  That was when I added her second agent.

NOTE Confidence: 0.828991651535034

 $00:34:45.170 \longrightarrow 00:34:47.348$  Show pyramid so mimicking the phentramin

 $00:34:47.348 \longrightarrow 00:34:48.800$  topiramate improved under combination

NOTE Confidence: 0.828991651535034

 $00{:}34{:}48.848 \dashrightarrow 00{:}34{:}50.132$  under the trade name of Kissimmee

NOTE Confidence: 0.828991651535034

 $00{:}34{:}50.132 \longrightarrow 00{:}34{:}52.053$  am I like to use these dictionaries

NOTE Confidence: 0.828991651535034

 $00:34:52.053 \longrightarrow 00:34:53.409$  from many different reasons.

NOTE Confidence: 0.828991651535034

00:34:53.410 --> 00:34:55.930 First of all I try to use the lowest

NOTE Confidence: 0.828991651535034

 $00:34:55.930 \longrightarrow 00:34:57.978$  number of medications that I can.

NOTE Confidence: 0.828991651535034

 $00:34:57.980 \longrightarrow 00:34:59.402$  I do recognize that these patients

NOTE Confidence: 0.828991651535034

 $00{:}34{:}59.402 \dashrightarrow 00{:}35{:}00.758$  will need to be maintained

NOTE Confidence: 0.828991651535034

 $00:35:00.758 \longrightarrow 00:35:02.538$  indefinitely on these medications for

NOTE Confidence: 0.828991651535034

00:35:02.538 --> 00:35:04.390 chronic treatment of their obesity,

NOTE Confidence: 0.828991651535034

 $00:35:04.390 \longrightarrow 00:35:06.357$  and so the least number of drugs

NOTE Confidence: 0.828991651535034

 $00:35:06.357 \longrightarrow 00:35:08.350$  I can use is always great.

NOTE Confidence: 0.828991651535034

 $00:35:08.350 \longrightarrow 00:35:10.513$  And if I start medications in combination

NOTE Confidence: 0.828991651535034

 $00:35:10.513 \longrightarrow 00:35:12.604$  also I'm not able to control for

NOTE Confidence: 0.828991651535034

 $00:35:12.604 \longrightarrow 00:35:15.060$  what caused what in terms of side effects.

 $00:35:15.060 \longrightarrow 00:35:17.420$  So let's say I put her on the

NOTE Confidence: 0.828991651535034

 $00:35:17.420 \longrightarrow 00:35:18.819$  combination at the outset.

NOTE Confidence: 0.828991651535034

 $00:35:18.820 \longrightarrow 00:35:20.160$  And she developed some significant

NOTE Confidence: 0.828991651535034 00:35:20.160 --> 00:35:20.696 side effect. NOTE Confidence: 0.828991651535034

00:35:20.700 --> 00:35:23.103 Was it due to the finishing move here mate?

NOTE Confidence: 0.828991651535034

00:35:23.110 --> 00:35:24.979 May I could probably try to guess,

NOTE Confidence: 0.828991651535034

 $00:35:24.980 \dashrightarrow 00:35:26.648$  but I might eliminate using two

NOTE Confidence: 0.828991651535034

 $00:35:26.648 \longrightarrow 00:35:28.200$  potential drugs that could be used.

NOTE Confidence: 0.828991651535034

 $00:35:28.200 \longrightarrow 00:35:30.342$  Keeping in mind that we don't

NOTE Confidence: 0.828991651535034

 $00:35:30.342 \longrightarrow 00:35:31.770$  have alot available currently.

NOTE Confidence: 0.828991651535034

 $00:35:31.770 \longrightarrow 00:35:34.074$  This is one of my favorite case actually

NOTE Confidence: 0.828991651535034

 $00:35:34.074 \longrightarrow 00:35:35.937$  saw this patient today and clinic

NOTE Confidence: 0.828991651535034

00:35:35.937 --> 00:35:38.479 which I'm doing via zoom so not really.

NOTE Confidence: 0.828991651535034

 $00:35:38.480 \longrightarrow 00:35:40.310$  She was on the vineyard when

NOTE Confidence: 0.828991651535034

 $00:35:40.310 \longrightarrow 00:35:41.530$  we did our appointment,

NOTE Confidence: 0.828991651535034

 $00:35:41.530 \longrightarrow 00:35:43.744$  so there's a 57 year old woman who's the

00:35:43.744 --> 00:35:45.800 past medical history of dyslipidemia,

NOTE Confidence: 0.828991651535034

 $00:35:45.800 \longrightarrow 00:35:46.452$  breast cancer,

NOTE Confidence: 0.828991651535034

 $00:35:46.452 \longrightarrow 00:35:46.778$  hypertension,

NOTE Confidence: 0.828991651535034

 $00:35:46.778 \longrightarrow 00:35:48.408$  depression and pernicious anemia give

NOTE Confidence: 0.828991651535034

 $00{:}35{:}48.408 \dashrightarrow 00{:}35{:}50.200$  you a little bit more information

NOTE Confidence: 0.828991651535034

 $00:35:50.200 \longrightarrow 00:35:51.288$  here about her diet.

NOTE Confidence: 0.828991651535034

00:35:51.290 --> 00:35:52.892 For some reason she likes Brown

NOTE Confidence: 0.828991651535034

 $00{:}35{:}52.892 \dashrightarrow 00{:}35{:}54.634$  rice in the morning cashews and

NOTE Confidence: 0.828991651535034

 $00:35:54.634 \longrightarrow 00:35:56.488$  goat cheese for lunch she's doing

NOTE Confidence: 0.828991651535034

 $00{:}35{:}56.488 \dashrightarrow 00{:}35{:}57.999$  fish sandwich with vegetables.

NOTE Confidence: 0.828991651535034

 $00:35:58.000 \longrightarrow 00:35:59.830$  She may do some cheese and

NOTE Confidence: 0.828991651535034

 $00:35:59.830 \longrightarrow 00:36:01.050$  crackers or some cashews,

NOTE Confidence: 0.828991651535034

 $00{:}36{:}01.050 \dashrightarrow 00{:}36{:}02.778$  and for dinner she's doing more

NOTE Confidence: 0.828991651535034

 $00{:}36{:}02.778 \longrightarrow 00{:}36{:}04.671$  like a spinach salad with some

NOTE Confidence: 0.828991651535034

 $00:36:04.671 \longrightarrow 00:36:06.035$  lovely vegetables added in.

 $00:36:06.040 \longrightarrow 00:36:06.889$  She's pretty active.

NOTE Confidence: 0.828991651535034

 $00:36:06.889 \longrightarrow 00:36:08.587$  You can see here she's doing

NOTE Confidence: 0.828991651535034

00:36:08.587 --> 00:36:10.140 exercise class three times a week,

NOTE Confidence: 0.845041573047638

 $00:36:10.140 \longrightarrow 00:36:11.634$  two videos a week for 1/2

NOTE Confidence: 0.845041573047638

 $00:36:11.634 \longrightarrow 00:36:13.140$  hour to doing yoga tonight.

NOTE Confidence: 0.845041573047638

00:36:13.140 --> 00:36:15.044 She's getting 8 hours of restful sleep,

NOTE Confidence: 0.845041573047638

00:36:15.050 --> 00:36:17.003 so I know you guys are sleep

NOTE Confidence: 0.845041573047638

00:36:17.003 --> 00:36:18.434 position is wondering about what's

NOTE Confidence: 0.845041573047638

 $00:36:18.434 \longrightarrow 00:36:20.578$  going on with the sleep and for her

NOTE Confidence: 0.845041573047638

 $00:36:20.633 \longrightarrow 00:36:22.418$  she was doing a pretty good job.

NOTE Confidence: 0.845041573047638

 $00:36:22.420 \longrightarrow 00:36:24.412$  So here again we have another one of

NOTE Confidence: 0.845041573047638

00:36:24.412 --> 00:36:26.239 these graphs they're drawing to skill,

NOTE Confidence: 0.845041573047638

 $00:36:26.240 \longrightarrow 00:36:28.102$  so weight in pounds again to remind

NOTE Confidence: 0.845041573047638

 $00:36:28.102 \longrightarrow 00:36:30.294$  you on this axis, BMI or body mass

NOTE Confidence: 0.845041573047638

 $00:36:30.294 \longrightarrow 00:36:32.519$  index on this axis and then time here,

NOTE Confidence: 0.845041573047638

 $00:36:32.520 \longrightarrow 00:36:34.671$  but I want you to see is that this

00:36:34.671 --> 00:36:36.340 patient had very severe obesity.

NOTE Confidence: 0.845041573047638

 $00:36:36.340 \longrightarrow 00:36:38.900$  BMI is greater than 50 or above, very severe.

NOTE Confidence: 0.845041573047638

 $00:36:38.900 \longrightarrow 00:36:40.200$  Sometimes you'll hear this.

NOTE Confidence: 0.845041573047638

 $00:36:40.200 \longrightarrow 00:36:41.500$  To a super obesity,

NOTE Confidence: 0.845041573047638

 $00:36:41.500 \longrightarrow 00:36:43.125$  she comes down quite nicely.

NOTE Confidence: 0.845041573047638

 $00:36:43.130 \longrightarrow 00:36:46.380$  I think we can agree to a BMI of 33,

NOTE Confidence: 0.845041573047638

 $00:36:46.380 \longrightarrow 00:36:48.005$  which is quite quite dramatic

NOTE Confidence: 0.845041573047638

00:36:48.005 --> 00:36:49.630 in terms of weight lost.

NOTE Confidence: 0.845041573047638

 $00:36:49.630 \longrightarrow 00:36:51.780$  150 pounds of weight loss.

NOTE Confidence: 0.845041573047638

00:36:51.780 --> 00:36:54.097 An I would ask you know what

NOTE Confidence: 0.845041573047638

00:36:54.097 --> 00:36:56.467 happened and that you might be like.

NOTE Confidence: 0.845041573047638

00:36:56.470 --> 00:36:59.485 Well, she didn't do surgery for the last one,

NOTE Confidence: 0.845041573047638

 $00{:}36{:}59.490 \dashrightarrow 00{:}37{:}01.814$  so the likelihood this is surgery from

NOTE Confidence: 0.845041573047638

 $00:37:01.814 \longrightarrow 00:37:03.865$  an obesity medicine position is probably

NOTE Confidence: 0.845041573047638

 $00:37:03.865 \longrightarrow 00:37:06.189$  low and you probably right with that.

 $00:37:06.190 \longrightarrow 00:37:07.530$  So this was phentramin,

NOTE Confidence: 0.845041573047638

 $00{:}37{:}07.530 \dashrightarrow 00{:}37{:}08.870$  a tapir mating combination.

NOTE Confidence: 0.845041573047638

 $00:37:08.870 \longrightarrow 00:37:11.054$  I wanted to put this up because some

NOTE Confidence: 0.845041573047638

00:37:11.054 --> 00:37:13.277 people have very very pronounced

NOTE Confidence: 0.845041573047638

00:37:13.277 --> 00:37:14.897 responses to these medications.

NOTE Confidence: 0.845041573047638

 $00:37:14.900 \longrightarrow 00:37:16.424$  I want you to notice is

NOTE Confidence: 0.845041573047638

 $00:37:16.424 \longrightarrow 00:37:17.940$  that she began to regain.

NOTE Confidence: 0.845041573047638

 $00:37:17.940 \longrightarrow 00:37:21.500$  And so she comes back up to this BMI of 40,

NOTE Confidence: 0.845041573047638

 $00:37:21.500 \longrightarrow 00:37:22.472$  which is severe,

NOTE Confidence: 0.845041573047638

 $00:37:22.472 \longrightarrow 00:37:24.416$  but nowhere near where she started.

NOTE Confidence: 0.845041573047638

 $00:37:24.420 \longrightarrow 00:37:26.485$  But notice we were very sharp increase

NOTE Confidence: 0.845041573047638

 $00:37:26.485 \longrightarrow 00:37:28.629$  and you might wonder what happened.

NOTE Confidence: 0.845041573047638

 $00:37:28.630 \longrightarrow 00:37:30.574$  So at that time her physician

NOTE Confidence: 0.845041573047638

 $00{:}37{:}30.574 \dashrightarrow 00{:}37{:}31.870$  stopped her medications because,

NOTE Confidence: 0.845041573047638

 $00:37:31.870 \longrightarrow 00:37:32.193$  oh,

NOTE Confidence: 0.845041573047638

 $00:37:32.193 \longrightarrow 00:37:33.808$  you don't keep these medications

 $00:37:33.808 \longrightarrow 00:37:34.454$  on long-term,

NOTE Confidence: 0.845041573047638

 $00:37:34.460 \longrightarrow 00:37:36.196$  or that was the mantra at the

NOTE Confidence: 0.845041573047638

 $00{:}37{:}36.196 \dashrightarrow 00{:}37{:}38.277$  time and she quickly began to

NOTE Confidence: 0.845041573047638

00:37:38.277 --> 00:37:39.969 regain obviously an intervention,

NOTE Confidence: 0.845041573047638

 $00:37:39.970 \longrightarrow 00:37:42.642$  a curd, and we were able to bring

NOTE Confidence: 0.845041573047638

 $00:37:42.642 \longrightarrow 00:37:44.826$  her back down to BMI of 33.

NOTE Confidence: 0.845041573047638

 $00:37:44.830 \longrightarrow 00:37:47.098$  But this time she underwent a bypass.

NOTE Confidence: 0.845041573047638

 $00:37:47.100 \longrightarrow 00:37:49.137$  I think that we can all agree

NOTE Confidence: 0.845041573047638

 $00{:}37{:}49.137 \dashrightarrow 00{:}37{:}51.369$  here that her response to by pass.

NOTE Confidence: 0.845041573047638

 $00:37:51.370 \longrightarrow 00:37:52.895$  Compared to response to phentramin

NOTE Confidence: 0.845041573047638 00:37:52.895 --> 00:37:53.505 into appear, NOTE Confidence: 0.845041573047638

 $00:37:53.510 \longrightarrow 00:37:55.030$  Maine comma knows significantly different.

NOTE Confidence: 0.845041573047638

00:37:55.030 --> 00:37:56.560 You might say, OK, well,

NOTE Confidence: 0.845041573047638

 $00:37:56.560 \longrightarrow 00:37:58.330$  actually for she was much to

NOTE Confidence: 0.845041573047638

 $00:37:58.330 \longrightarrow 00:38:00.220$  have much more to lose here.

 $00:38:00.220 \longrightarrow 00:38:00.830$  Be up,

NOTE Confidence: 0.845041573047638

 $00{:}38{:}00.830 \dashrightarrow 00{:}38{:}03.270$  but like that's not the response to by pass.

NOTE Confidence: 0.845041573047638

 $00:38:03.270 \longrightarrow 00:38:05.100$  Not really that great, you know.

NOTE Confidence: 0.845041573047638

 $00:38:05.100 \longrightarrow 00:38:07.652$  Maybe we would expect you to bring more

NOTE Confidence: 0.845041573047638

 $00:38:07.652 \longrightarrow 00:38:10.590$  to the line now she comes in to see me.

NOTE Confidence: 0.845041573047638

 $00:38:10.590 \longrightarrow 00:38:12.697$  Of course, here when she's begun to

NOTE Confidence: 0.845041573047638

 $00:38:12.697 \longrightarrow 00:38:14.860$  regain and notice kind of gradual gain.

NOTE Confidence: 0.845041573047638 00:38:14.860 --> 00:38:15.218 Overtime.

NOTE Confidence: 0.845041573047638

 $00{:}38{:}15.218 --> 00{:}38{:}15.934 \ {\rm Sorry \ guys}.$ 

NOTE Confidence: 0.845041573047638

00:38:15.934 --> 00:38:16.292 Anne,

NOTE Confidence: 0.845041573047638

 $00{:}38{:}16.292 \dashrightarrow 00{:}38{:}18.440$  she comes here with the BMI

NOTE Confidence: 0.845041573047638

 $00:38:18.513 \longrightarrow 00:38:20.338$  44.5 comes down nicely here.

NOTE Confidence: 0.845041573047638

 $00:38:20.340 \longrightarrow 00:38:22.552$  Notice this is a much lower point

NOTE Confidence: 0.845041573047638

 $00:38:22.552 \longrightarrow 00:38:24.653$  than she initially got back in 2004

NOTE Confidence: 0.845041573047638

 $00:38:24.653 \longrightarrow 00:38:26.660$  or even after her surgery in 2006,

NOTE Confidence: 0.845041573047638

 $00:38:26.660 \longrightarrow 00:38:28.690$  and so the question I would ask

 $00:38:28.690 \longrightarrow 00:38:30.942$  you is what did I do for this

NOTE Confidence: 0.845041573047638

 $00:38:30.942 \longrightarrow 00:38:33.015$  lovely lady who is on the vineyard

NOTE Confidence: 0.845041573047638

 $00:38:33.015 \longrightarrow 00:38:35.085$  hanging out an at this time.

NOTE Confidence: 0.845041573047638

00:38:35.090 --> 00:38:37.498 I just reintroduce what was working for her,

NOTE Confidence: 0.845041573047638

 $00:38:37.500 \longrightarrow 00:38:39.228$  which was the Phentramin and that

NOTE Confidence: 0.845041573047638

00:38:39.228 --> 00:38:41.371 appear mate so I would have argued

NOTE Confidence: 0.845041573047638

 $00:38:41.371 \longrightarrow 00:38:43.219$  that she didn't need the room.

NOTE Confidence: 0.845041573047638

 $00:38:43.220 \longrightarrow 00:38:45.074$  Why that that was not a

NOTE Confidence: 0.845041573047638

 $00:38:45.074 \longrightarrow 00:38:46.310$  necessary procedure for her

NOTE Confidence: 0.831529855728149

 $00:38:46.374 \longrightarrow 00:38:48.498$  as much as I am a proponent for the

NOTE Confidence: 0.831529855728149

00:38:48.498 --> 00:38:50.739 use of metabolic in Berwick surgery,

NOTE Confidence: 0.831529855728149

 $00:38:50.740 \longrightarrow 00:38:51.730$  even in children.

NOTE Confidence: 0.831529855728149

 $00:38:51.730 \longrightarrow 00:38:53.710$  Which I do send to surgery,

NOTE Confidence: 0.831529855728149

 $00{:}38{:}53.710 \longrightarrow 00{:}38{:}55.852$  but for this particular patient we've

NOTE Confidence: 0.831529855728149

 $00:38:55.852 \longrightarrow 00:38:58.380$  already proven that she had done well

 $00:38:58.380 \longrightarrow 00:39:00.105$  with pharmacotherapy and she needed

NOTE Confidence: 0.831529855728149

 $00:39:00.105 \dashrightarrow 00:39:02.270$  to remain on such pharmacotherapy.

NOTE Confidence: 0.831529855728149

 $00:39:02.270 \longrightarrow 00:39:03.662$  This case resonate with

NOTE Confidence: 0.831529855728149

 $00:39:03.662 \longrightarrow 00:39:04.706$  you asleep physicians.

NOTE Confidence: 0.831529855728149

 $00:39:04.710 \longrightarrow 00:39:07.185$  A 46 year old woman coming in with the

NOTE Confidence: 0.831529855728149

 $00:39:07.185 \longrightarrow 00:39:09.577$  past medical history of hypertension,

NOTE Confidence: 0.831529855728149

 $00:39:09.580 \longrightarrow 00:39:10.624$  anxiety, and depression.

NOTE Confidence: 0.831529855728149

 $00:39:10.624 \longrightarrow 00:39:12.017$  She has asthma, fibromyalgia.

NOTE Confidence: 0.831529855728149

00:39:12.017 --> 00:39:14.099 She's a history of bipolar disorder,

NOTE Confidence: 0.831529855728149

 $00:39:14.100 \longrightarrow 00:39:15.328$  gerd, and metabolic syndrome.

NOTE Confidence: 0.831529855728149

 $00{:}39{:}15.328 {\:{\circ}{\circ}{\circ}\:} 00{:}39{:}16.863$  She's history being on several

NOTE Confidence: 0.831529855728149

 $00:39:16.863 \longrightarrow 00:39:18.279$  way promoting medications,

NOTE Confidence: 0.831529855728149

00:39:18.280 --> 00:39:19.336 including Disapper Acetone,

NOTE Confidence: 0.831529855728149

00:39:19.336 --> 00:39:20.744 Quote Typing Deluxe Attan

NOTE Confidence: 0.831529855728149

00:39:20.744 --> 00:39:22.110 Deluxe 18 satala pram,

NOTE Confidence: 0.831529855728149

 $00:39:22.110 \longrightarrow 00:39:23.806$  fluoxetine does openemr transitional

 $00:39:23.806 \longrightarrow 00:39:25.926$  attend law pre gabelein nortriptyline

NOTE Confidence: 0.831529855728149

 $00{:}39{:}25.926 \dashrightarrow 00{:}39{:}28.149$  I think if this medicine thing doesn't

NOTE Confidence: 0.831529855728149

 $00:39:28.149 \longrightarrow 00:39:30.958$  work out for me will be an auction ear

NOTE Confidence: 0.831529855728149

00:39:30.958 --> 00:39:32.873 postpartum weight retention of £20 and.

NOTE Confidence: 0.831529855728149

 $00:39:32.873 \longrightarrow 00:39:34.488$  Notice she has poor sleep.

NOTE Confidence: 0.831529855728149

00:39:34.490 --> 00:39:35.730 She has daytime hypersomnolence

NOTE Confidence: 0.831529855728149

00:39:35.730 --> 00:39:37.145 she's snoring, his morning headache,

NOTE Confidence: 0.831529855728149

 $00{:}39{:}37.145 \dashrightarrow 00{:}39{:}39.000$  and so this is my favorite case

NOTE Confidence: 0.831529855728149

 $00:39:39.056 \longrightarrow 00:39:40.708$  for this particular presentation.

NOTE Confidence: 0.831529855728149

 $00:39:40.710 \longrightarrow 00:39:42.570$  She comes in with mild obesity,

NOTE Confidence: 0.831529855728149

00:39:42.570 --> 00:39:43.778 a BMI of 33.5,

NOTE Confidence: 0.831529855728149

 $00:39:43.778 \longrightarrow 00:39:45.990$  and she comes down quite nicely here.

NOTE Confidence: 0.831529855728149

 $00{:}39{:}45.990 \dashrightarrow 00{:}39{:}49.100$  I think we can say to a BMI of 26.

NOTE Confidence: 0.831529855728149

 $00:39:49.100 \longrightarrow 00:39:52.210$  There are few clues as to what we're kind of.

NOTE Confidence: 0.831529855728149

00:39:52.210 --> 00:39:54.406 My treatment strategy for this particular

 $00:39:54.406 \longrightarrow 00:39:56.810$  patient and the clues are as follows.

NOTE Confidence: 0.831529855728149

 $00{:}39{:}56.810 \dashrightarrow 00{:}39{:}58.186$  She did have undiagnosed

NOTE Confidence: 0.831529855728149

 $00:39:58.186 \longrightarrow 00:39:59.218$  obstructive sleep apnea,

NOTE Confidence: 0.831529855728149

 $00:39:59.220 \longrightarrow 00:40:01.628$  did get seen by one of you.

NOTE Confidence: 0.831529855728149

 $00:40:01.630 \longrightarrow 00:40:02.659$  Lovely sleep positions

NOTE Confidence: 0.831529855728149

 $00:40:02.659 \longrightarrow 00:40:04.717$  shouldn't hi index of about 30.

NOTE Confidence: 0.831529855728149

 $00:40:04.720 \longrightarrow 00:40:07.573$  Three when I sent her so she was started

NOTE Confidence: 0.831529855728149

 $00{:}40{:}07.573 \dashrightarrow 00{:}40{:}10.338$  on C Pap and the only other treatment

NOTE Confidence: 0.831529855728149

 $00{:}40{:}10.338 \dashrightarrow 00{:}40{:}12.979$  that I gave to her was metform in.

NOTE Confidence: 0.831529855728149

 $00:40:12.980 \longrightarrow 00:40:14.816$  So metformin is the first line

NOTE Confidence: 0.831529855728149

 $00{:}40{:}14.816 \dashrightarrow 00{:}40{:}16.507$  agent for the treatment of

NOTE Confidence: 0.831529855728149

00:40:16.507 --> 00:40:18.139 psychotropic induced weight gain.

NOTE Confidence: 0.831529855728149

 $00{:}40{:}18.140 \dashrightarrow 00{:}40{:}20.732$  You could see that she had been on

NOTE Confidence: 0.831529855728149

 $00:40:20.732 \longrightarrow 00:40:22.524$  several psychotropic agents for the

NOTE Confidence: 0.831529855728149

 $00:40:22.524 \longrightarrow 00:40:24.329$  treatment of her bipolar disorder.

NOTE Confidence: 0.831529855728149

 $00:40:24.330 \longrightarrow 00:40:26.200$  This response not with traditional

 $00:40:26.200 \longrightarrow 00:40:28.460$  pharmacotherapy but with good old C Pap.

NOTE Confidence: 0.831529855728149

 $00{:}40{:}28.460 \dashrightarrow 00{:}40{:}31.508$  Can met formin notice how I told

NOTE Confidence: 0.831529855728149

 $00:40:31.508 \longrightarrow 00:40:33.032$  you they will?

NOTE Confidence: 0.831529855728149

00:40:33.040 --> 00:40:35.208 Respond with a little bit of a bounce

NOTE Confidence: 0.831529855728149

 $00:40:35.208 \longrightarrow 00:40:37.509$  up from where they can stabilize it.

NOTE Confidence: 0.831529855728149

 $00:40:37.510 \longrightarrow 00:40:38.630$  A different set point.

NOTE Confidence: 0.831529855728149

00:40:38.630 --> 00:40:40.030 Don't buy those product hands

NOTE Confidence: 0.831529855728149

 $00:40:40.030 \longrightarrow 00:40:41.379$  at the lowest setpoint.

NOTE Confidence: 0.831529855728149

00:40:41.380 --> 00:40:44.468 Wait until your body kind of recalibrates OK.

NOTE Confidence: 0.831529855728149

 $00:40:44.470 \longrightarrow 00:40:45.520$  Keeping their.

NOTE Confidence: 0.887343764305115

 $00:40:47.800 \longrightarrow 00:40:50.985$  Alright, so this is where she stabilized.

NOTE Confidence: 0.887343764305115

 $00{:}40{:}50.990 \dashrightarrow 00{:}40{:}53.478$  This is a 34 year old woman passed

NOTE Confidence: 0.887343764305115

 $00{:}40{:}53.478 \dashrightarrow 00{:}40{:}55.168$  with migraine headaches, as thma,

NOTE Confidence: 0.887343764305115

 $00{:}40{:}55.168 {\:\dashrightarrow\:} 00{:}40{:}55.864$  Hypothyroidism, Depression,

NOTE Confidence: 0.887343764305115

00:40:55.864 --> 00:40:56.908 generalized anxiety disorder,

00:40:56.910 --> 00:40:58.908 history of anorexia nervosa is also

NOTE Confidence: 0.887343764305115

00:40:58.908 --> 00:41:01.372 important to note that patients that have

NOTE Confidence: 0.887343764305115

00:41:01.372 --> 00:41:03.514 a history of either anorexia nervosa,

NOTE Confidence: 0.887343764305115

 $00:41:03.520 \longrightarrow 00:41:05.260$  bulimia and of those there,

NOTE Confidence: 0.887343764305115

 $00:41:05.260 \longrightarrow 00:41:08.044$  or binge eating disorder have about a 40

NOTE Confidence: 0.887343764305115

00:41:08.044 --> 00:41:10.132 to 50\% likelihood of developing obesity.

NOTE Confidence: 0.887343764305115

 $00:41:10.132 \longrightarrow 00:41:12.220$  If not already struggling with obesity.

NOTE Confidence: 0.887343764305115

00:41:12.220 --> 00:41:13.608 Obviously, Anorexia would not

NOTE Confidence: 0.887343764305115

00:41:13.608 --> 00:41:15.343 be those of binge eating.

NOTE Confidence: 0.887343764305115

00:41:15.350 --> 00:41:17.438 An orderly Mia may have obesity,

NOTE Confidence: 0.887343764305115

 $00{:}41{:}17.440 --> 00{:}41{:}18.828$ gerd Chondromalacia of the

NOTE Confidence: 0.887343764305115

00:41:18.828 --> 00:41:20.216 Nitches vitamin D deficiency.

NOTE Confidence: 0.887343764305115

 $00:41:20.220 \longrightarrow 00:41:22.404$  She has a history of suicidal ideations

NOTE Confidence: 0.887343764305115

 $00:41:22.404 \longrightarrow 00:41:24.297$  Which we talked about a little

NOTE Confidence: 0.887343764305115

 $00:41:24.297 \longrightarrow 00:41:26.079$  bit in that weight stigma piece.

NOTE Confidence: 0.887343764305115

00:41:26.080 --> 00:41:27.490 I'm sure the history beyond

 $00:41:27.490 \longrightarrow 00:41:28.336$  fluoxetine for depression.

NOTE Confidence: 0.887343764305115

 $00{:}41{:}28.340 \dashrightarrow 00{:}41{:}30.237$  I do want to note the fluoxetine

NOTE Confidence: 0.887343764305115

 $00:41:30.237 \longrightarrow 00:41:32.258$  or Prozac is by far the most

NOTE Confidence: 0.887343764305115

00:41:32.258 --> 00:41:33.693 weight neutral of SSR eyes,

NOTE Confidence: 0.887343764305115

00:41:33.700 --> 00:41:35.386 but I still like to capture.

NOTE Confidence: 0.887343764305115

00:41:35.390 --> 00:41:36.974 Some people may have experience in

NOTE Confidence: 0.887343764305115

00:41:36.974 --> 00:41:39.059 weight gain but not typically the issue.

NOTE Confidence: 0.816940009593964

 $00:41:41.170 \longrightarrow 00:41:42.800$  So in this particular case,

NOTE Confidence: 0.816940009593964

 $00:41:42.800 \longrightarrow 00:41:45.096$  we have this woman that came in

NOTE Confidence: 0.816940009593964

 $00{:}41{:}45.096 \dashrightarrow 00{:}41{:}47.409$  with initially a BMI of 37 comes

NOTE Confidence: 0.816940009593964

 $00:41:47.409 \longrightarrow 00:41:49.293$  down nicely with the BMI 25.5.

NOTE Confidence: 0.816940009593964

 $00:41:49.300 \longrightarrow 00:41:50.920$  This was with behavioral means,

NOTE Confidence: 0.816940009593964

 $00{:}41{:}50.920 \dashrightarrow 00{:}41{:}52.870$  so she did Weight Watchers here.

NOTE Confidence: 0.816940009593964

00:41:52.870 --> 00:41:54.500 Notice she creeps up gradually,

NOTE Confidence: 0.816940009593964

 $00:41:54.500 \longrightarrow 00:41:57.416$  so the body wants to defend that set point.

 $00:41:57.420 \longrightarrow 00:42:00.345$  She came to me with a BMI of 32.

NOTE Confidence: 0.816940009593964

 $00{:}42{:}00.350 \dashrightarrow 00{:}42{:}02.226$  We bring her down to about 26.5

NOTE Confidence: 0.816940009593964

 $00:42:02.226 \longrightarrow 00:42:04.256$  and this was with the introduction

NOTE Confidence: 0.816940009593964

00:42:04.256 --> 00:42:06.196 of two medications be propri,

NOTE Confidence: 0.816940009593964

 $00:42:06.200 \longrightarrow 00:42:08.150$  on which many of you may

NOTE Confidence: 0.816940009593964

 $00:42:08.150 \longrightarrow 00:42:09.450$  be familiar with doses.

NOTE Confidence: 0.816940009593964

 $00{:}42{:}09.450 \dashrightarrow 00{:}42{:}11.442$  Onus money may be less familiar

NOTE Confidence: 0.816940009593964

 $00:42:11.442 \longrightarrow 00:42:12.438$  with its anticonvulsant.

NOTE Confidence: 0.816940009593964

 $00:42:12.440 \longrightarrow 00:42:13.076$  That combination,

NOTE Confidence: 0.816940009593964

 $00:42:13.076 \longrightarrow 00:42:15.620$  I think will be a drug that becomes

NOTE Confidence: 0.816940009593964

00:42:15.687 --> 00:42:17.427 approved in combo by the FDA.

NOTE Confidence: 0.816940009593964

 $00:42:17.430 \longrightarrow 00:42:18.975$  It was first really published

NOTE Confidence: 0.816940009593964

 $00:42:18.975 \longrightarrow 00:42:20.860$  in the literature back in 2007,

NOTE Confidence: 0.816940009593964

 $00:42:20.860 \longrightarrow 00:42:23.134$  which is the citation you see

NOTE Confidence: 0.816940009593964

 $00:42:23.134 \longrightarrow 00:42:25.729$  at the bottom of your screen.

NOTE Confidence: 0.816940009593964

 $00{:}42{:}25.730 \dashrightarrow 00{:}42{:}28.054$  I think we're getting to the end

00:42:28.054 --> 00:42:30.679 of the cases 60 year old man Dino,

NOTE Confidence: 0.816940009593964

 $00:42:30.680 \longrightarrow 00:42:32.969$  that I've only presented women so I

NOTE Confidence: 0.816940009593964

 $00:42:32.969 \longrightarrow 00:42:35.122$  wanted to make you men fill included

NOTE Confidence: 0.816940009593964

 $00:42:35.122 \longrightarrow 00:42:37.995$  here so we have a 60 year old man

NOTE Confidence: 0.816940009593964

 $00:42:37.995 \longrightarrow 00:42:39.920$  with hypertension type 2 diabetes,

NOTE Confidence: 0.816940009593964

00:42:39.920 --> 00:42:40.580 dyslipidemia, hypogonadism,

NOTE Confidence: 0.816940009593964

00:42:40.580 --> 00:42:42.180 secondary juice, obesity, and depression.

NOTE Confidence: 0.816940009593964

 $00:42:42.180 \longrightarrow 00:42:44.315$  You can see what he eats is

NOTE Confidence: 0.816940009593964

 $00:42:44.315 \longrightarrow 00:42:45.860$  not quite as virtuous.

NOTE Confidence: 0.816940009593964

 $00:42:45.860 \longrightarrow 00:42:47.510$  Is what we've seen previously.

NOTE Confidence: 0.816940009593964

00:42:47.510 --> 00:42:49.820 Fiber one bar bagel with cream cheese.

NOTE Confidence: 0.816940009593964

00:42:49.820 --> 00:42:50.810 Chicken Salad Sandwich,

NOTE Confidence: 0.816940009593964

 $00:42:50.810 \longrightarrow 00:42:53.120$  which is just basically mayonnaise and bread.

NOTE Confidence: 0.816940009593964

00:42:53.120 --> 00:42:53.800 Chicken Caesar.

NOTE Confidence: 0.816940009593964

 $00:42:53.800 \longrightarrow 00:42:55.840$  Similar hot dog pizza he eats.

00:42:55.840 --> 00:42:57.044 Chicken vegetable salad in

NOTE Confidence: 0.816940009593964

 $00:42:57.044 \longrightarrow 00:42:58.549$  the evening and he's toast.

NOTE Confidence: 0.816940009593964

 $00:42:58.550 \longrightarrow 00:43:00.215$  Tells me he's recently illuminated

NOTE Confidence: 0.816940009593964

00:43:00.215 --> 00:43:02.456 rice and pasta he's doing about an

NOTE Confidence: 0.816940009593964

00:43:02.456 --> 00:43:04.269 hour and a half of daily walking,

NOTE Confidence: 0.816940009593964

 $00:43:04.270 \longrightarrow 00:43:06.070$  and he's doing some afternoon calisthenics.

NOTE Confidence: 0.816940009593964

 $00:43:06.070 \longrightarrow 00:43:08.758$  This is his graph which shows you that

NOTE Confidence: 0.816940009593964

 $00:43:08.758 \longrightarrow 00:43:11.484$  he started off with me with a BMI of 57.

NOTE Confidence: 0.816940009593964

 $00:43:11.490 \longrightarrow 00:43:13.464$  I really thought with the degree of

NOTE Confidence: 0.816940009593964

00:43:13.464 --> 00:43:15.809 weight that he had that he would be

NOTE Confidence: 0.816940009593964

 $00{:}43{:}15.809 \dashrightarrow 00{:}43{:}17.635$  a great surgical candidate and also

NOTE Confidence: 0.816940009593964

00:43:17.635 --> 00:43:19.615 in light of his comorbid conditions,

NOTE Confidence: 0.816940009593964

 $00:43:19.620 \longrightarrow 00:43:22.630$  which you can see here is that he did not,

NOTE Confidence: 0.816940009593964

 $00:43:22.630 \longrightarrow 00:43:24.779$  and I can tell you that almost

NOTE Confidence: 0.816940009593964

 $00:43:24.779 \longrightarrow 00:43:26.330$  every patient that comes in.

NOTE Confidence: 0.816940009593964

 $00{:}43{:}26.330 \dashrightarrow 00{:}43{:}27.990$  With very severe obesity does

 $00:43:27.990 \longrightarrow 00:43:28.986$  not want surgery.

NOTE Confidence: 0.816940009593964

00:43:28.990 --> 00:43:31.726 But after a year he had only come

NOTE Confidence: 0.816940009593964

00:43:31.726 --> 00:43:34.295 from a BMI of 57 down to 52,

NOTE Confidence: 0.816940009593964

 $00:43:34.300 \longrightarrow 00:43:35.960$  which was still very severe.

NOTE Confidence: 0.816940009593964

 $00:43:35.960 \longrightarrow 00:43:38.156$  He did undergo a sleeve gastrectomy

NOTE Confidence: 0.816940009593964

 $00:43:38.156 \longrightarrow 00:43:40.566$  which is the VSG that you see

NOTE Confidence: 0.816940009593964

 $00:43:40.566 \longrightarrow 00:43:42.589$  here and you can see that he

NOTE Confidence: 0.816940009593964

 $00:43:42.662 \longrightarrow 00:43:44.916$  stabilizes here and a BMI of 37.

NOTE Confidence: 0.816940009593964

 $00:43:44.920 \longrightarrow 00:43:46.248$  He did pretty well.

NOTE Confidence: 0.816940009593964

 $00:43:46.248 \longrightarrow 00:43:48.734$  This is 58% of his excess body

NOTE Confidence: 0.816940009593964

 $00{:}43{:}48.734 \dashrightarrow 00{:}43{:}50.589$  weight loss which is average

NOTE Confidence: 0.816940009593964

 $00:43:50.589 \longrightarrow 00:43:52.669$  response to a sleeve as between 55

NOTE Confidence: 0.816940009593964

 $00{:}43{:}52.669 \rightarrow 00{:}43{:}54.915$  and 60% of excess excess would be

NOTE Confidence: 0.816940009593964

 $00:43:54.915 \longrightarrow 00:43:56.870$  everything above this BMI of 25.

NOTE Confidence: 0.816940009593964

 $00:43:56.870 \longrightarrow 00:43:58.620$  So we did pretty low.

 $00:43:58.620 \longrightarrow 00:44:00.408$  But I added to pure made.

NOTE Confidence: 0.816940009593964

 $00{:}44{:}00.410 \dashrightarrow 00{:}44{:}01.373$  After he stabilized,

NOTE Confidence: 0.816940009593964

 $00:44:01.373 \longrightarrow 00:44:03.620$  you can see that it is stabilized

NOTE Confidence: 0.816940009593964

 $00:44:03.688 \longrightarrow 00:44:05.774$  over the course of about six months

NOTE Confidence: 0.816940009593964

 $00:44:05.774 \longrightarrow 00:44:08.038$  to appear mate was added and we were

NOTE Confidence: 0.816940009593964

 $00:44:08.038 \longrightarrow 00:44:10.840$  able to drive him down to a BMI of 30.

NOTE Confidence: 0.816940009593964

 $00:44:10.840 \longrightarrow 00:44:12.412$  I published the largest studies to

NOTE Confidence: 0.816940009593964

 $00:44:12.412 \longrightarrow 00:44:14.226$  date on the use of pharmacotherapy

NOTE Confidence: 0.816940009593964

 $00:44:14.226 \longrightarrow 00:44:16.338$  as an adjunct to metabolic and

NOTE Confidence: 0.816940009593964

00:44:16.338 --> 00:44:17.902 bariatric surgery with pull data

NOTE Confidence: 0.816940009593964

 $00{:}44{:}17.902 \dashrightarrow 00{:}44{:}19.510$  here from GH in combination with

NOTE Confidence: 0.816940009593964

 $00:44:19.510 \longrightarrow 00:44:21.815$  the data that was provided by

NOTE Confidence: 0.816940009593964

 $00:44:21.815 \longrightarrow 00:44:23.850$  Cornell Anlu erroneous group there.

NOTE Confidence: 0.846121728420258

 $00:44:23.850 \longrightarrow 00:44:26.310$  And so you can see that he has done quite

NOTE Confidence: 0.846121728420258

00:44:26.376 --> 00:44:28.519 well with his response, very final case,

NOTE Confidence: 0.846121728420258

00:44:28.519 --> 00:44:30.830 and then I will have a few minutes.

 $00:44:30.830 \longrightarrow 00:44:32.670$  I think for questions 36 year old woman

NOTE Confidence: 0.846121728420258

 $00:44:32.670 \longrightarrow 00:44:34.201$  past medical history of hypothyroidism

NOTE Confidence: 0.846121728420258

 $00:44:34.201 \longrightarrow 00:44:35.565$  to stymic allergic rhinitis,

NOTE Confidence: 0.846121728420258

00:44:35.570 --> 00:44:36.960 chronic back pain migraine headaches,

NOTE Confidence: 0.846121728420258

00:44:36.960 --> 00:44:39.462 you can see that her diet is pretty virtuous,

NOTE Confidence: 0.846121728420258

 $00{:}44{:}39.470 \longrightarrow 00{:}44{:}42.074$  pretty active at the gym, as you can see,

NOTE Confidence: 0.846121728420258

 $00:44:42.074 \longrightarrow 00:44:44.887$  you can see that she does 6 to 7

NOTE Confidence: 0.846121728420258

00:44:44.887 --> 00:44:46.747 hours a night of restful sleep.

NOTE Confidence: 0.846121728420258

 $00:44:46.750 \longrightarrow 00:44:48.829$  When she comes in to see me,

NOTE Confidence: 0.846121728420258

 $00:44:48.830 \longrightarrow 00:44:51.206$  she comes in at a BMI of 36.

NOTE Confidence: 0.846121728420258

00:44:51.210 --> 00:44:53.716 She is moderate obesity and she comes

NOTE Confidence: 0.846121728420258

 $00:44:53.716 \longrightarrow 00:44:56.624$  down here to BMI of 29.5 but it takes

NOTE Confidence: 0.846121728420258

 $00{:}44{:}56.624 \dashrightarrow 00{:}44{:}59.306$  us two years for us to get her there.

NOTE Confidence: 0.846121728420258

 $00:44:59.310 \longrightarrow 00:45:00.780$  Notice how she comes back.

NOTE Confidence: 0.846121728420258

 $00:45:00.780 \longrightarrow 00:45:02.240$  That's what century do appear.

 $00:45:02.240 \longrightarrow 00:45:04.039$  Make who's back to a BMI of

NOTE Confidence: 0.846121728420258

 $00:45:04.039 \longrightarrow 00:45:05.760$  36 and you might wonder.

NOTE Confidence: 0.846121728420258

 $00:45:05.760 \longrightarrow 00:45:06.984$  OK, well what happened?

NOTE Confidence: 0.846121728420258

 $00:45:06.984 \longrightarrow 00:45:09.153$  There are few clues on the slide

NOTE Confidence: 0.846121728420258

 $00:45:09.153 \longrightarrow 00:45:11.029$  so she's a 36 year old woman.

NOTE Confidence: 0.846121728420258

 $00:45:11.030 \longrightarrow 00:45:12.495$  She did decide that she

NOTE Confidence: 0.846121728420258

 $00:45:12.495 \longrightarrow 00:45:13.667$  wanted to have children.

NOTE Confidence: 0.846121728420258

 $00:45:13.670 \longrightarrow 00:45:15.847$  All of the medications with an exceptional

NOTE Confidence: 0.846121728420258

 $00{:}45{:}15.847 \dashrightarrow 00{:}45{:}17.351$  met formin are contraindicated during the

NOTE Confidence: 0.846121728420258

 $00:45:17.351 \longrightarrow 00:45:18.935$  use of pregnancy and or breastfeeding.

NOTE Confidence: 0.846121728420258

 $00:45:18.940 \longrightarrow 00:45:21.140$  So we took her off of these medications

NOTE Confidence: 0.846121728420258

 $00:45:21.140 \longrightarrow 00:45:23.582$  an it took four months to regain the

NOTE Confidence: 0.846121728420258

 $00:45:23.582 \longrightarrow 00:45:25.970$  weight that it took two years to lose.

NOTE Confidence: 0.846121728420258

 $00:45:25.970 \longrightarrow 00:45:28.133$  So the chronic use of these medications

NOTE Confidence: 0.846121728420258

 $00:45:28.133 \longrightarrow 00:45:29.895$  isn't even important outside of the

NOTE Confidence: 0.846121728420258

 $00:45:29.895 \longrightarrow 00:45:32.220$  context of someone who is trying to conceive.

00:45:32.220 --> 00:45:34.158 She was able to successfully conceive,

NOTE Confidence: 0.846121728420258

 $00:45:34.160 \longrightarrow 00:45:36.098$  but responded with that weight response.

NOTE Confidence: 0.846121728420258

00:45:36.100 --> 00:45:38.026 So if you take home points,

NOTE Confidence: 0.846121728420258

 $00:45:38.030 \longrightarrow 00:45:39.848$  we want to track weight loss

NOTE Confidence: 0.846121728420258

 $00:45:39.848 \longrightarrow 00:45:41.910$  in terms of excess body weight.

NOTE Confidence: 0.846121728420258

 $00:45:41.910 \longrightarrow 00:45:44.486$  We want to listen to those patient cues.

NOTE Confidence: 0.846121728420258

00:45:44.490 --> 00:45:46.428 I ask my patients every single

NOTE Confidence: 0.846121728420258

00:45:46.428 --> 00:45:48.043 visit about their hunger, satiety,

NOTE Confidence: 0.846121728420258

 $00:45:48.043 \longrightarrow 00:45:49.658$  and side effects of medications.

NOTE Confidence: 0.846121728420258

 $00{:}45{:}49.660 \dashrightarrow 00{:}45{:}51.781$  If there one medications we want to

NOTE Confidence: 0.846121728420258

00:45:51.781 --> 00:45:53.220 encourage healthy lifestyle behaviors,

NOTE Confidence: 0.846121728420258

 $00{:}45{:}53.220 \dashrightarrow 00{:}45{:}55.086$  I will not start medications without

NOTE Confidence: 0.846121728420258

NOTE Confidence: 0.846121728420258

00:45:57.059 --> 00:45:59.081 least 150 minutes of moderate intensity

NOTE Confidence: 0.846121728420258

00:45:59.081 --> 00:46:01.288 activity per week with high dive quality.

 $00:46:01.290 \longrightarrow 00:46:03.565$  If a patient does have a superior

NOTE Confidence: 0.846121728420258

 $00:46:03.565 \longrightarrow 00:46:04.215$  response to.

NOTE Confidence: 0.846121728420258

 $00:46:04.220 \longrightarrow 00:46:05.925$  Pharmacotherapy which is 5 to

NOTE Confidence: 0.846121728420258

 $00:46:05.925 \longrightarrow 00:46:07.980$  10% of total body weight loss.

NOTE Confidence: 0.846121728420258

 $00:46:07.980 \longrightarrow 00:46:10.108$  We do want to continue these medications

NOTE Confidence: 0.846121728420258

00:46:10.108 --> 00:46:12.467 indefinitely and we do want to advise

NOTE Confidence: 0.846121728420258

 $00:46:12.467 \longrightarrow 00:46:14.212$  women of reproductive potential about

NOTE Confidence: 0.846121728420258

00:46:14.212 --> 00:46:16.187 discontinuing medication prior to conception.

NOTE Confidence: 0.846121728420258

 $00:46:16.190 \longrightarrow 00:46:18.577$  I wrote a book here at MGH.

NOTE Confidence: 0.846121728420258

 $00:46:18.580 \longrightarrow 00:46:21.036$  As you can see published by the MGA

NOTE Confidence: 0.846121728420258

 $00{:}46{:}21.036 {\:{\circ}{\circ}{\circ}}>00{:}46{:}22.756$  Psychiatry Academy on facing overweight

NOTE Confidence: 0.846121728420258

 $00:46:22.756 \longrightarrow 00:46:24.838$  and obesity which is published with

NOTE Confidence: 0.846121728420258

00:46:24.838 --> 00:46:27.129 some of my psychiatry colleagues here,

NOTE Confidence: 0.846121728420258

 $00:46:27.130 \longrightarrow 00:46:29.610$  our goal was to kind of pull together

NOTE Confidence: 0.846121728420258

 $00:46:29.610 \longrightarrow 00:46:31.402$  information for both clinicians and

NOTE Confidence: 0.846121728420258

 $00:46:31.402 \longrightarrow 00:46:33.622$  for patients with regards to obesity.

 $00:46:33.630 \longrightarrow 00:46:34.902$  If you are interested,

NOTE Confidence: 0.846121728420258

 $00{:}46{:}34.902 \dashrightarrow 00{:}46{:}36.810$  this is available free for those

NOTE Confidence: 0.846121728420258

 $00:46:36.869 \longrightarrow 00:46:38.429$  that have Kindle Unlimited.

NOTE Confidence: 0.846121728420258 00:46:38.430 --> 00:46:39.324 On Amazon,

NOTE Confidence: 0.846121728420258

 $00:46:39.324 \longrightarrow 00:46:42.006$  and if not this still available

NOTE Confidence: 0.846121728420258

 $00:46:42.006 \longrightarrow 00:46:43.630$  in the Amazon.

NOTE Confidence: 0.846121728420258

00:46:43.630 --> 00:46:46.262 This is me doctor Fatima Cody from thank

NOTE Confidence: 0.846121728420258

 $00:46:46.262 \longrightarrow 00:46:48.869$  you each for your time and attention.

NOTE Confidence: 0.846121728420258

 $00{:}46{:}48.870 \longrightarrow 00{:}46{:}51.222$  Hopefully you got a chance to see

NOTE Confidence: 0.846121728420258

 $00:46:51.222 \longrightarrow 00:46:53.016$  how patients respond to multiple

NOTE Confidence: 0.846121728420258

 $00:46:53.016 \longrightarrow 00:46:54.099$  forms of therapy.

NOTE Confidence: 0.846121728420258

 $00{:}46{:}54.100 \dashrightarrow 00{:}46{:}56.812$  And I would love to take any questions

NOTE Confidence: 0.846121728420258

 $00{:}46{:}56.812 \dashrightarrow 00{:}46{:}59.340$  at this time. Thank you so much.

NOTE Confidence: 0.865126550197601

 $00:47:01.460 \longrightarrow 00:47:02.884$  Thank you doctor Sanford,

NOTE Confidence: 0.865126550197601

 $00:47:02.884 \longrightarrow 00:47:04.664$  that was really just fantastic

00:47:04.664 --> 00:47:06.858 overview that was filled with so much

NOTE Confidence: 0.865126550197601

 $00:47:06.858 \longrightarrow 00:47:08.429$  information useful to all of us.

NOTE Confidence: 0.865126550197601

 $00:47:08.430 \longrightarrow 00:47:10.878$  If anyone has questions you can take this

NOTE Confidence: 0.865126550197601

 $00:47:10.878 \longrightarrow 00:47:12.511$  opportunity to please unmute yourselves

NOTE Confidence: 0.865126550197601

 $00:47:12.511 \longrightarrow 00:47:14.765$  and ask your question on your own.

NOTE Confidence: 0.865126550197601

00:47:14.770 --> 00:47:17.940 Or if you prefer to put it in the chat,

NOTE Confidence: 0.865126550197601

 $00:47:17.940 \longrightarrow 00:47:19.848$  I'll read it out for you.

NOTE Confidence: 0.865126550197601

 $00:47:19.850 \longrightarrow 00:47:22.378$  Yes, so I'd like to ask a question.

NOTE Confidence: 0.865126550197601

 $00{:}47{:}22.380 \dashrightarrow 00{:}47{:}26.921$  This is Mayor Krieger. OK. Right,

NOTE Confidence: 0.865126550197601

 $00:47:26.921 \longrightarrow 00:47:30.990$  so 70% of our of the patients that we see,

NOTE Confidence: 0.865126550197601

 $00{:}47{:}30.990 \dashrightarrow 00{:}47{:}33.366$  the routine patients we see with

NOTE Confidence: 0.865126550197601

 $00:47:33.366 \longrightarrow 00:47:35.843$  with sleep apnea have obesity there

NOTE Confidence: 0.865126550197601

 $00:47:35.843 \longrightarrow 00:47:38.692$  obese and don't use that word right?

NOTE Confidence: 0.865126550197601

 $00:47:38.700 \longrightarrow 00:47:40.760$  We got rid of that.

NOTE Confidence: 0.865126550197601

 $00:47:40.760 \longrightarrow 00:47:41.840$  They have obesity.

NOTE Confidence: 0.865126550197601 00:47:41.840 --> 00:47:42.920 I got you.

 $00:47:42.920 \longrightarrow 00:47:45.224$  They're bigger than they would like

NOTE Confidence: 0.865126550197601

 $00:47:45.224 \longrightarrow 00:47:48.611$  to be an an and we start them on

NOTE Confidence: 0.865126550197601

 $00:47:48.611 \longrightarrow 00:47:52.179$  C Pap and we and most of the time we

NOTE Confidence: 0.865126550197601

00:47:52.179 --> 00:47:54.440 don't do anything about their weight

NOTE Confidence: 0.865126550197601

 $00:47:54.440 \longrightarrow 00:47:56.240$  and and they're not necessarily,

NOTE Confidence: 0.865126550197601

00:47:56.240 --> 00:47:57.860 you know, they don't necessarily

NOTE Confidence: 0.865126550197601

 $00:47:57.860 \longrightarrow 00:48:00.560$  have a huge BMI or average patient.

NOTE Confidence: 0.865126550197601

00:48:00.560 --> 00:48:03.440 Probably has a BMI between 33 and 35.

NOTE Confidence: 0.865126550197601

00:48:03.440 --> 00:48:05.600 OK, should we be starting to?

NOTE Confidence: 0.865126550197601

 $00:48:05.600 \longrightarrow 00:48:07.742$  Maybe treat them with some of the

NOTE Confidence: 0.865126550197601

 $00:48:07.742 \longrightarrow 00:48:09.920$  medications that you mentioned absolutely.

NOTE Confidence: 0.865126550197601

 $00:48:09.920 \longrightarrow 00:48:11.720$  So if you're finding that

NOTE Confidence: 0.865126550197601

 $00{:}48{:}11.720 \dashrightarrow 00{:}48{:}12.800$  they've maximized lifestyle?

NOTE Confidence: 0.865126550197601

 $00:48:12.800 \longrightarrow 00:48:15.768$  Remember, I said that I don't ever as.

NOTE Confidence: 0.865126550197601

00:48:15.770 --> 00:48:18.234 You know, if you just think about it,

 $00:48:18.240 \longrightarrow 00:48:20.094$  the clinical trials that were done

NOTE Confidence: 0.865126550197601

00:48:20.094 --> 00:48:21.640 on pharmacol therapy agents, right?

NOTE Confidence: 0.865126550197601

 $00:48:21.640 \longrightarrow 00:48:22.880$  You had Group One.

NOTE Confidence: 0.865126550197601

 $00:48:22.880 \longrightarrow 00:48:24.658$  Let's say that was on a placebo

NOTE Confidence: 0.865126550197601

 $00:48:24.658 \longrightarrow 00:48:26.735$  but had died and lifestyle kind of

NOTE Confidence: 0.865126550197601

00:48:26.735 --> 00:48:28.607 maximize and then group two that

NOTE Confidence: 0.865126550197601

00:48:28.674 --> 00:48:30.409 got the actual the pharmacotherapy

NOTE Confidence: 0.865126550197601

 $00:48:30.409 \longrightarrow 00:48:32.458$  agent with that same diet and

NOTE Confidence: 0.865126550197601

 $00:48:32.458 \longrightarrow 00:48:33.998$  lifestyle really kind of managed.

NOTE Confidence: 0.865126550197601

 $00:48:34.000 \longrightarrow 00:48:35.988$  I don't like to start the medications

NOTE Confidence: 0.865126550197601

 $00{:}48{:}35.988 \dashrightarrow 00{:}48{:}37.400$  without that being maximized,

NOTE Confidence: 0.865126550197601

 $00:48:37.400 \longrightarrow 00:48:38.900$  especially since we know that we're

NOTE Confidence: 0.865126550197601

 $00:48:38.900 \longrightarrow 00:48:41.109$  going to use these medications indefinitely.

NOTE Confidence: 0.865126550197601

 $00{:}48{:}41.110 \dashrightarrow 00{:}48{:}42.958$  So after maximizing that Doctor Krieger,

NOTE Confidence: 0.865126550197601

00:48:42.960 --> 00:48:45.130 if you're noticing that Oh my goodness,

NOTE Confidence: 0.865126550197601

 $00:48:45.130 \longrightarrow 00:48:46.740$  my patients are still struggling.

 $00:48:46.740 \longrightarrow 00:48:48.420$  The addition of pharmacotherapy can

NOTE Confidence: 0.865126550197601

 $00{:}48{:}48.420 \dashrightarrow 00{:}48{:}50.496$  have significant could be a significant

NOTE Confidence: 0.865126550197601

 $00:48:50.496 \longrightarrow 00:48:52.542$  benefit for the patient with regards

NOTE Confidence: 0.865126550197601

 $00:48:52.542 \longrightarrow 00:48:54.872$  to proving what it sounds like to be

NOTE Confidence: 0.865126550197601

00:48:54.872 --> 00:48:56.415 more mild to very moderate obesity,

NOTE Confidence: 0.865126550197601

 $00:48:56.415 \longrightarrow 00:48:58.695$  but we that's those are the patients that

NOTE Confidence: 0.865126550197601

 $00:48:58.695 \longrightarrow 00:49:00.829$  the medications are really suited for,

NOTE Confidence: 0.865126550197601

 $00{:}49{:}00.830 \dashrightarrow 00{:}49{:}02.078$  almost ideally because those

NOTE Confidence: 0.865126550197601

00:49:02.078 --> 00:49:03.638 patients that have severe obesity,

NOTE Confidence: 0.865126550197601

 $00{:}49{:}03.640 \dashrightarrow 00{:}49{:}05.824$  often with an exception of that patient,

NOTE Confidence: 0.865126550197601

 $00:49:05.830 \longrightarrow 00:49:08.021$  that I showed you that was by

NOTE Confidence: 0.865126550197601

 $00:49:08.021 \longrightarrow 00:49:08.960$  far an exception,

NOTE Confidence: 0.865126550197601

 $00{:}49{:}08.960 \dashrightarrow 00{:}49{:}11.277$  aren't going to get the the average

NOTE Confidence: 0.865126550197601

00:49:11.277 --> 00:49:13.343 weight loss which five to 10% is

NOTE Confidence: 0.865126550197601

00:49:13.343 --> 00:49:15.534 what many of the agents will produce.

 $00:49:15.540 \longrightarrow 00:49:17.654$  So I definitely would think about the

NOTE Confidence: 0.865126550197601

 $00:49:17.654 \longrightarrow 00:49:19.256$  introduction of these medications and

NOTE Confidence: 0.865126550197601

 $00:49:19.256 \longrightarrow 00:49:21.489$  kind of putting that in your wheelhouse.

NOTE Confidence: 0.865126550197601

00:49:21.490 --> 00:49:24.066 So which one would would you pick?

NOTE Confidence: 0.865126550197601

 $00:49:24.070 \longrightarrow 00:49:25.910$  It depends on the person,

NOTE Confidence: 0.865126550197601

 $00{:}49{:}25.910 \dashrightarrow 00{:}49{:}28.502$  so I always personalize it to the person

NOTE Confidence: 0.865126550197601

00:49:28.502 --> 00:49:31.060 based upon what they're presenting with,

NOTE Confidence: 0.865126550197601 00:49:31.060 --> 00:49:31.393 right?

NOTE Confidence: 0.865126550197601

 $00{:}49{:}31.393 \dashrightarrow 00{:}49{:}33.724$  So if it's a patient that has

NOTE Confidence: 0.865126550197601

 $00:49:33.724 \longrightarrow 00:49:35.838$  let's say maybe pre diabetes,

NOTE Confidence: 0.865126550197601

 $00{:}49{:}35.840 \dashrightarrow 00{:}49{:}37.480$ hemoglobin A1C is 6.4.

NOTE Confidence: 0.865126550197601

 $00:49:37.480 \longrightarrow 00:49:39.940$  I'm concerned about them with regards

NOTE Confidence: 0.865126550197601

 $00:49:40.010 \longrightarrow 00:49:42.836$  that I might start a GOP one agonists if

NOTE Confidence: 0.865126550197601

 $00:49:42.836 \longrightarrow 00:49:45.407$  their insurance allows me to cover it.

NOTE Confidence: 0.865126550197601

 $00:49:45.410 \longrightarrow 00:49:47.895$  Getting over the idea of a daily

NOTE Confidence: 0.865126550197601

 $00:49:47.895 \longrightarrow 00:49:50.175$  injection can be a barrier to

 $00:49:50.175 \longrightarrow 00:49:52.075$  some patients in addition to.

NOTE Confidence: 0.865126550197601

 $00:49:52.080 \longrightarrow 00:49:53.615$  The prior the problems with

NOTE Confidence: 0.865126550197601

00:49:53.615 --> 00:49:55.150 getting this improved by insurers.

NOTE Confidence: 0.817442357540131

 $00:49:55.150 \longrightarrow 00:49:57.508$  We do have decent coverage for many of the

NOTE Confidence: 0.817442357540131

 $00:49:57.508 \longrightarrow 00:49:59.448$  private insurers here in Massachusetts,

NOTE Confidence: 0.817442357540131

 $00:49:59.450 \longrightarrow 00:50:00.980$  but not from mass health.

NOTE Confidence: 0.817442357540131

 $00:50:00.980 \longrightarrow 00:50:02.835$  Which of core at least 1/3 of

NOTE Confidence: 0.817442357540131

00:50:02.835 --> 00:50:04.360 my patients or masshealth,

NOTE Confidence: 0.817442357540131

 $00:50:04.360 \longrightarrow 00:50:06.816$  which don't have that same level of coverage?

NOTE Confidence: 0.817442357540131

 $00:50:06.820 \longrightarrow 00:50:08.044$  If it's a patient,

NOTE Confidence: 0.817442357540131

00:50:08.044 --> 00:50:09.574 that's maybe a younger patient.

NOTE Confidence: 0.817442357540131

 $00:50:09.580 \longrightarrow 00:50:11.115$  Very active patient might consider

NOTE Confidence: 0.817442357540131

 $00{:}50{:}11.115 \dashrightarrow 00{:}50{:}12.650$  the introduction of finter mean,

NOTE Confidence: 0.817442357540131

 $00{:}50{:}12.650 \dashrightarrow 00{:}50{:}14.372$  but with Phentramin it requires a

NOTE Confidence: 0.817442357540131

00:50:14.372 --> 00:50:16.812 little bit more work on the side of

 $00:50:16.812 \longrightarrow 00:50:18.352$  the patient because phentramin can

NOTE Confidence: 0.817442357540131

 $00:50:18.352 \longrightarrow 00:50:20.317$  increase blood pressure and heart rate.

NOTE Confidence: 0.817442357540131

 $00:50:20.320 \longrightarrow 00:50:22.360$  I have them take their blood

NOTE Confidence: 0.817442357540131

 $00:50:22.360 \longrightarrow 00:50:23.720$  pressure and heart rate.

NOTE Confidence: 0.817442357540131

00:50:23.720 --> 00:50:24.812 Try my stark phentramin

NOTE Confidence: 0.817442357540131

 $00:50:24.812 \longrightarrow 00:50:25.904$  or increase their dose.

NOTE Confidence: 0.817442357540131

00:50:25.910 --> 00:50:27.560 I have them taken Monday morning,

NOTE Confidence: 0.817442357540131

00:50:27.560 --> 00:50:29.105 Wednesday midday and Friday evening

NOTE Confidence: 0.817442357540131

00:50:29.105 --> 00:50:31.438 and send that through our what we call

NOTE Confidence: 0.817442357540131

 $00:50:31.438 \longrightarrow 00:50:33.452$  our patient gateway in epic so that I

NOTE Confidence: 0.817442357540131

 $00{:}50{:}33.452 \dashrightarrow 00{:}50{:}35.230$  can see how the patient is responding.

NOTE Confidence: 0.817442357540131

 $00:50:35.230 \longrightarrow 00:50:36.868$  Not just regards to their way.

NOTE Confidence: 0.817442357540131

 $00:50:36.870 \longrightarrow 00:50:37.418$  That's great.

NOTE Confidence: 0.817442357540131

00:50:37.418 --> 00:50:38.788 If they lose weight obviously,

NOTE Confidence: 0.817442357540131

00:50:38.790 --> 00:50:40.518 but I want to make sure that I'm

NOTE Confidence: 0.817442357540131

 $00:50:40.518 \longrightarrow 00:50:42.361$  not causing any elevations of blood

00:50:42.361 --> 00:50:43.713 pressure systolic or diastolic,

NOTE Confidence: 0.817442357540131

00:50:43.720 --> 00:50:44.756 and or Tachy Cardia,

NOTE Confidence: 0.817442357540131

 $00:50:44.756 \longrightarrow 00:50:46.647$  so there's a little bit more work

NOTE Confidence: 0.817442357540131

 $00:50:46.647 \longrightarrow 00:50:48.572$  on that side is the cheapest of

NOTE Confidence: 0.817442357540131

 $00{:}50{:}48.572 \dashrightarrow 00{:}50{:}50.007$  everything that we talked about

NOTE Confidence: 0.817442357540131

00:50:50.007 --> 00:50:51.657 because we can get that pretty

NOTE Confidence: 0.817442357540131

00:50:51.657 --> 00:50:53.310 cheap if you're using good RX.

NOTE Confidence: 0.817442357540131

 $00{:}50{:}53.310 \dashrightarrow 00{:}50{:}55.050$  For example, the tablet is covered.

NOTE Confidence: 0.817442357540131

 $00{:}50{:}55.050 \dashrightarrow 00{:}50{:}56.760$  Very, very inexpensive for some reason.

NOTE Confidence: 0.817442357540131

 $00{:}50{:}56.760 \dashrightarrow 00{:}50{:}58.755$  Also, if you use your AAA card,

NOTE Confidence: 0.817442357540131

 $00:50:58.760 \longrightarrow 00:50:59.052$  yes,

NOTE Confidence: 0.817442357540131

 $00:50:59.052 \longrightarrow 00:51:01.096$  the Carthage use of your car breaks

NOTE Confidence: 0.817442357540131

 $00{:}51{:}01.096 \dashrightarrow 00{:}51{:}03.029$  down on the side of the road.

NOTE Confidence: 0.817442357540131

00:51:03.030 --> 00:51:04.460 It gives you 1/2% off.

NOTE Confidence: 0.817442357540131

 $00:51:04.460 \longrightarrow 00:51:06.170$  I'm are half off of phentramin

 $00:51:06.170 \longrightarrow 00:51:07.310$  so that just depends.

NOTE Confidence: 0.817442357540131

 $00{:}51{:}07.310 \dashrightarrow 00{:}51{:}09.116$  I try to personalize it by patient

NOTE Confidence: 0.817442357540131

00:51:09.116 --> 00:51:10.736 and many patients will end up

NOTE Confidence: 0.817442357540131

 $00:51:10.736 \longrightarrow 00:51:12.314$  on multiple agents which I will

NOTE Confidence: 0.817442357540131

00:51:12.314 --> 00:51:13.579 gradually introduce overtime,

NOTE Confidence: 0.817442357540131

 $00:51:13.580 \longrightarrow 00:51:15.218$  but I never start more than

NOTE Confidence: 0.817442357540131

 $00:51:15.218 \longrightarrow 00:51:16.710$  one agent at a time.

NOTE Confidence: 0.817442357540131

 $00:51:16.710 \longrightarrow 00:51:18.922$  So just to give it just to

NOTE Confidence: 0.817442357540131

 $00{:}51{:}18.922 \to 00{:}51{:}21.220$  give you some thought process.

NOTE Confidence: 0.817442357540131

00:51:21.220 --> 00:51:23.698 Thank you hi, this is Chuck.

NOTE Confidence: 0.817442357540131

 $00{:}51{:}23.700 --> 00{:}51{:}25.412$  Also wanna sleep dot.

NOTE Confidence: 0.817442357540131

00:51:25.412 --> 00:51:27.980 Thanks for a wonderful talk freely

NOTE Confidence: 0.817442357540131

 $00:51:28.059 \longrightarrow 00:51:30.579$  and perspective on how complex this

NOTE Confidence: 0.817442357540131

 $00{:}51{:}30.579 \dashrightarrow 00{:}51{:}33.464$  diseases and so one of the questions

NOTE Confidence: 0.817442357540131

 $00:51:33.464 \longrightarrow 00:51:36.082$  I have is mechanistic and it has

NOTE Confidence: 0.817442357540131

 $00{:}51{:}36.090 \dashrightarrow 00{:}51{:}39.234$  to do with leptin and sort of near

 $00:51:39.234 \longrightarrow 00:51:42.922$  and dear to us as a sleep positions

NOTE Confidence: 0.817442357540131

 $00:51:42.922 \longrightarrow 00:51:45.340$  because leptin does have some.

NOTE Confidence: 0.817442357540131

 $00{:}51{:}45.340 \dashrightarrow 00{:}51{:}46.824$  Function in restaurant control.

NOTE Confidence: 0.817442357540131

 $00:51:46.824 \longrightarrow 00:51:48.679$  Another error muscle tone and

NOTE Confidence: 0.817442357540131

00:51:48.679 --> 00:51:50.457 there's been some recent studies,

NOTE Confidence: 0.817442357540131

 $00:51:50.460 \longrightarrow 00:51:52.656$  at least in animals and mice,

NOTE Confidence: 0.817442357540131

 $00:51:52.660 \longrightarrow 00:51:54.892$  showing that at least some hypothesis

NOTE Confidence: 0.817442357540131

 $00:51:54.892 \longrightarrow 00:51:57.148$  that perhaps it's really the resistance

NOTE Confidence: 0.817442357540131

 $00:51:57.148 \longrightarrow 00:51:59.980$  to left in the central resistance to leptin,

NOTE Confidence: 0.817442357540131

 $00:51:59.980 \longrightarrow 00:52:02.535$  that's causing some of the weight gain,

NOTE Confidence: 0.817442357540131

 $00:52:02.540 \longrightarrow 00:52:04.370$  and even some of the

NOTE Confidence: 0.817442357540131

 $00:52:04.370 \longrightarrow 00:52:05.468$  sleep disorder breathing.

NOTE Confidence: 0.817442357540131

 $00:52:05.470 \longrightarrow 00:52:06.930$  So I was wondering,

NOTE Confidence: 0.817442357540131

 $00:52:06.930 \longrightarrow 00:52:08.755$  based on what you know,

NOTE Confidence: 0.817442357540131

00:52:08.760 --> 00:52:10.710 how much of the contribution of

00:52:10.710 --> 00:52:13.328 leptin is due to resistance in the

NOTE Confidence: 0.817442357540131

 $00:52:13.328 \longrightarrow 00:52:15.812$  sent from the central nervous system.

NOTE Confidence: 0.817442357540131

00:52:15.820 --> 00:52:18.543 And you know you've shown very nice

NOTE Confidence: 0.817442357540131

 $00:52:18.543 \longrightarrow 00:52:21.436$  diagram of the two mechanisms by which

NOTE Confidence: 0.817442357540131

 $00:52:21.436 \longrightarrow 00:52:24.300$  left and could act within the CNS.

NOTE Confidence: 0.817442357540131

00:52:24.300 --> 00:52:25.665 And whether that differs by

NOTE Confidence: 0.817442357540131

 $00:52:25.665 \longrightarrow 00:52:27.030$  resistance status for each patient?

NOTE Confidence: 0.817442357540131

 $00:52:27.030 \longrightarrow 00:52:28.400$  Well, so it's you know,

NOTE Confidence: 0.817442357540131

00:52:28.400 --> 00:52:30.026 I think that's a great question,

NOTE Confidence: 0.817442357540131

 $00:52:30.030 \longrightarrow 00:52:31.934$  and one of the things that's was.

NOTE Confidence: 0.817442357540131

 $00:52:31.940 \longrightarrow 00:52:33.446$  I guess the reason why I'm

NOTE Confidence: 0.817442357540131

 $00:52:33.446 \longrightarrow 00:52:35.641$  going to be able to give you a

NOTE Confidence: 0.817442357540131

 $00{:}52{:}35.641 \dashrightarrow 00{:}52{:}37.327$  convoluted answer is that we don't

NOTE Confidence: 0.807645440101624

 $00:52:37.387 \longrightarrow 00:52:39.584$  know. I think is the answer to that.

NOTE Confidence: 0.807645440101624

 $00:52:39.590 \longrightarrow 00:52:41.858$  A lot of it is because we're not really

NOTE Confidence: 0.807645440101624

00:52:41.858 --> 00:52:43.683 measuring leptin in most patients, right?

 $00:52:43.683 \longrightarrow 00:52:45.867$  Like that's not one of our standard labs.

NOTE Confidence: 0.807645440101624

 $00:52:45.870 \longrightarrow 00:52:48.600$  When I even showed you guys the lapse to ask,

NOTE Confidence: 0.807645440101624

 $00:52:48.600 \longrightarrow 00:52:50.232$  you know like we can measure

NOTE Confidence: 0.807645440101624

00:52:50.232 --> 00:52:51.053 insulin resistance, right?

NOTE Confidence: 0.807645440101624

 $00:52:51.053 \longrightarrow 00:52:52.145$  If someone has hyperinsulinemia

NOTE Confidence: 0.807645440101624

00:52:52.145 --> 00:52:52.964 or hyperinsulinism present,

NOTE Confidence: 0.807645440101624

00:52:52.970 --> 00:52:54.542 we can order fasting insulin level

NOTE Confidence: 0.807645440101624

 $00:52:54.542 \longrightarrow 00:52:56.249$  to couple their other fasting labs.

NOTE Confidence: 0.807645440101624

 $00:52:56.250 \longrightarrow 00:52:58.140$  We don't really know for individual

NOTE Confidence: 0.807645440101624

 $00:52:58.140 \longrightarrow 00:52:59.085$  patients what's happening,

NOTE Confidence: 0.807645440101624

 $00:52:59.090 \longrightarrow 00:53:00.974$  and I'm sure that there's differences

NOTE Confidence: 0.807645440101624

 $00:53:00.974 \longrightarrow 00:53:02.550$  in how patients would look.

NOTE Confidence: 0.807645440101624

00:53:02.550 --> 00:53:04.130 I mean, we have patients,

NOTE Confidence: 0.807645440101624

 $00:53:04.130 \longrightarrow 00:53:04.752$  for example,

NOTE Confidence: 0.807645440101624

 $00:53:04.752 \longrightarrow 00:53:06.618$  that have BMI's that are in

00:53:06.618 --> 00:53:08.555 these kind of higher 5060 range

NOTE Confidence: 0.807645440101624

 $00:53:08.555 \longrightarrow 00:53:10.421$  that come in with no evidence,

NOTE Confidence: 0.807645440101624

 $00:53:10.430 \longrightarrow 00:53:12.242$  for example of hyperinsulinism and then

NOTE Confidence: 0.807645440101624

 $00:53:12.242 \longrightarrow 00:53:14.477$  patients that have very mild to moderate

NOTE Confidence: 0.807645440101624

 $00:53:14.477 \longrightarrow 00:53:16.097$  obesity that have hyperinsulinism in.

NOTE Confidence: 0.807645440101624

 $00{:}53{:}16.100 \dashrightarrow 00{:}53{:}17.894$  I would assume the same is

NOTE Confidence: 0.807645440101624

 $00:53:17.894 \longrightarrow 00:53:19.560$  true with left and right,

NOTE Confidence: 0.807645440101624

 $00:53:19.560 \longrightarrow 00:53:20.812$  so that there's probably

NOTE Confidence: 0.807645440101624

 $00{:}53{:}20.812 \dashrightarrow 00{:}53{:}22.064$  variations that don't directly

NOTE Confidence: 0.807645440101624

 $00:53:22.064 \longrightarrow 00:53:23.660$  correlate to one's weight status.

NOTE Confidence: 0.807645440101624

 $00:53:23.660 \longrightarrow 00:53:25.550$  I think just having an understanding

NOTE Confidence: 0.807645440101624

 $00:53:25.550 \longrightarrow 00:53:26.495$  of the complexity.

NOTE Confidence: 0.807645440101624

 $00:53:26.500 \longrightarrow 00:53:27.588$  Of this disease process,

NOTE Confidence: 0.807645440101624

 $00:53:27.588 \longrightarrow 00:53:30.120$  and how there's often a lot of trial and

NOTE Confidence: 0.807645440101624

00:53:30.120 --> 00:53:32.094 error in terms of of utilizing therapies,

NOTE Confidence: 0.807645440101624

00:53:32.100 --> 00:53:34.340 I think is kind of my thought process,

00:53:34.340 --> 00:53:36.300 and even with you guys asleep physicians,

NOTE Confidence: 0.807645440101624

 $00:53:36.300 \longrightarrow 00:53:37.944$  you know that people respond in

NOTE Confidence: 0.807645440101624

 $00:53:37.944 \longrightarrow 00:53:39.886$  terms of to see pap in different

NOTE Confidence: 0.807645440101624

 $00:53:39.886 \longrightarrow 00:53:42.074$  ways in terms of how you set your

NOTE Confidence: 0.807645440101624

00:53:42.074 --> 00:53:43.820 settings based upon their hi and

NOTE Confidence: 0.807645440101624

 $00:53:43.820 \longrightarrow 00:53:45.990$  all of these types of things that I

NOTE Confidence: 0.807645440101624

 $00:53:45.990 \longrightarrow 00:53:48.234$  would not be able to do very well

NOTE Confidence: 0.807645440101624

 $00{:}53{:}48.234 \dashrightarrow 00{:}53{:}50.299$  because I'm not trained in that way.

NOTE Confidence: 0.807645440101624

 $00{:}53{:}50.300 \dashrightarrow 00{:}53{:}52.290$  So I think that that so I gave you a

NOTE Confidence: 0.807645440101624

 $00{:}53{:}52.352 \dashrightarrow 00{:}53{:}54.042$  convoluted answer because there's not

NOTE Confidence: 0.807645440101624

 $00:53:54.042 \longrightarrow 00:53:56.731$  a direct like clear cut answer, but.

NOTE Confidence: 0.807645440101624

 $00:53:56.731 \longrightarrow 00:53:59.486$  Hopefully that gives some guess

NOTE Confidence: 0.807645440101624

 $00{:}53{:}59.486 \dashrightarrow 00{:}54{:}01.690$  response to the question.

NOTE Confidence: 0.807645440101624

00:54:01.690 --> 00:54:02.953 Sure, yeah, absolutely.

NOTE Confidence: 0.807645440101624

 $00:54:02.953 \longrightarrow 00:54:05.900$  Just maybe a comment to for mayor.

 $00:54:05.900 \longrightarrow 00:54:07.304$  One of the drugs,

NOTE Confidence: 0.807645440101624

 $00:54:07.304 \longrightarrow 00:54:09.410$  Unison light is very similar to

NOTE Confidence: 0.807645440101624

00:54:09.483 --> 00:54:11.884 a suit is olamide at my actually

NOTE Confidence: 0.807645440101624

 $00:54:11.884 \longrightarrow 00:54:13.709$  improve some of the sleep,

NOTE Confidence: 0.807645440101624 00:54:13.710 --> 00:54:14.121 disorder, NOTE Confidence: 0.807645440101624

 $00:54:14.121 \longrightarrow 00:54:16.176$  breathing something that is delightful

NOTE Confidence: 0.807645440101624

 $00:54:16.176 \longrightarrow 00:54:19.492$  so I Love Xena semide alot of so for

NOTE Confidence: 0.807645440101624

 $00:54:19.492 \longrightarrow 00:54:21.798$  patients that so tapir made us better

NOTE Confidence: 0.807645440101624

 $00{:}54{:}21.798 \dashrightarrow 00{:}54{:}24.038$  studied in obesity I would say the

NOTE Confidence: 0.807645440101624

 $00:54:24.038 \longrightarrow 00:54:26.130$  best of the two anticonvulsants studied.

NOTE Confidence: 0.807645440101624

 $00:54:26.130 \longrightarrow 00:54:28.260$  But for patients that develop significant

NOTE Confidence: 0.807645440101624

 $00:54:28.260 \longrightarrow 00:54:29.680$  issues with cognitive issues,

NOTE Confidence: 0.807645440101624

 $00:54:29.680 \longrightarrow 00:54:31.460$  word finding difficulty for example

NOTE Confidence: 0.807645440101624

 $00{:}54{:}31.460 \dashrightarrow 00{:}54{:}33.240$  with tapir made or paresthesias

NOTE Confidence: 0.807645440101624

 $00:54:33.296 \longrightarrow 00:54:34.358$  that are persistent.

NOTE Confidence: 0.807645440101624

 $00{:}54{:}34.360 \dashrightarrow 00{:}54{:}36.516$  I will switch them over to zonisamide.

 $00:54:36.520 \longrightarrow 00:54:38.015$  The typical starting those frozen

NOTE Confidence: 0.807645440101624

 $00{:}54{:}38.015 \dashrightarrow 00{:}54{:}39.920$  is my math published this letter.

NOTE Confidence: 0.807645440101624

 $00:54:39.920 \longrightarrow 00:54:42.090$  I can send this over to unlearn,

NOTE Confidence: 0.807645440101624

00:54:42.090 --> 00:54:43.710 kind of like my stepwise approach

NOTE Confidence: 0.807645440101624

 $00:54:43.710 \longrightarrow 00:54:45.759$  if I'm using to appear meters in

NOTE Confidence: 0.807645440101624

 $00:54:45.759 \longrightarrow 00:54:47.577$  this amide and surgery for obesity

NOTE Confidence: 0.807645440101624

 $00:54:47.577 \longrightarrow 00:54:48.880$  and related diseases.

NOTE Confidence: 0.807645440101624

 $00:54:48.880 \longrightarrow 00:54:51.352$  So as soon as my starting those typically

NOTE Confidence: 0.807645440101624

 $00:54:51.352 \longrightarrow 00:54:53.520$  would be 100 in the evening time,

NOTE Confidence: 0.807645440101624

00:54:53.520 --> 00:54:54.752 I just those anticonvulsants,

NOTE Confidence: 0.807645440101624

 $00:54:54.752 \longrightarrow 00:54:55.984$  even the evening time,

NOTE Confidence: 0.807645440101624

00:54:55.990 --> 00:54:57.535 because many of the patients

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 $00{:}54{:}57.535 \dashrightarrow 00{:}54{:}59.080$  will say they sleep better.

NOTE Confidence: 0.807645440101624

 $00:54:59.080 \longrightarrow 00:55:00.312$  Having taken that either

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 $00:55:00.312 \longrightarrow 00:55:01.852$  at dinner or at bedtime,

 $00:55:01.860 \longrightarrow 00:55:03.762$  that equivalent dose for to appear

NOTE Confidence: 0.807645440101624

00:55:03.762 --> 00:55:05.030 mate would be approximately.

NOTE Confidence: 0.807645440101624

 $00:55:05.030 \longrightarrow 00:55:06.854$  25 milligrams for the two appear

NOTE Confidence: 0.807645440101624

 $00:55:06.854 \longrightarrow 00:55:08.905$  made two of 100 milligram dose

NOTE Confidence: 0.807645440101624

00:55:08.905 --> 00:55:10.835 of zonisamide for my patients

NOTE Confidence: 0.807645440101624

 $00:55:10.835 \longrightarrow 00:55:13.390$  that maybe order 65 plus I am a

NOTE Confidence: 0.807645440101624

 $00:55:13.390 \longrightarrow 00:55:14.720$  little bit more gingerly in

NOTE Confidence: 0.815939843654633

00:55:14.720 --> 00:55:17.240 Amazonas amide and may start at a 50

NOTE Confidence: 0.815939843654633

 $00:55:17.240 \longrightarrow 00:55:19.348$  milligram dose which was just introduced

NOTE Confidence: 0.815939843654633

 $00:55:19.348 \longrightarrow 00:55:22.149$  in the market about three years ago or so.

NOTE Confidence: 0.815939843654633

 $00:55:22.150 \longrightarrow 00:55:24.088$  So just to give some perspective,

NOTE Confidence: 0.815939843654633

 $00:55:24.090 \longrightarrow 00:55:26.253$  Max dose for the treatment with zonisamide

NOTE Confidence: 0.815939843654633

 $00:55:26.253 \longrightarrow 00:55:28.528$  will be 400 milligrams in the evening

NOTE Confidence: 0.815939843654633

 $00:55:28.528 \longrightarrow 00:55:31.164$  that before castles on the Max dose that

NOTE Confidence: 0.815939843654633

 $00:55:31.164 \longrightarrow 00:55:33.446$  typically will use for the treatment of

NOTE Confidence: 0.815939843654633

 $00:55:33.446 \longrightarrow 00:55:35.718$  obesity with to appear mate would be.

00:55:35.720 --> 00:55:38.594 About 1:50, although most people will

NOTE Confidence: 0.815939843654633

 $00:55:38.594 \longrightarrow 00:55:41.506$  unfortunately develop some side effects when

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 $00:55:41.506 \longrightarrow 00:55:44.266$  they cross that 100 milligram threshold.

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 $00:55:44.270 \longrightarrow 00:55:47.063$  So much, I think super a few

NOTE Confidence: 0.815939843654633

 $00:55:47.063 \longrightarrow 00:55:48.800$  minutes over the hour.

NOTE Confidence: 0.815939843654633

 $00:55:48.800 \longrightarrow 00:55:50.628$  We will end tier,

NOTE Confidence: 0.815939843654633

00:55:50.628 --> 00:55:53.370 but thanks for writing your contact

NOTE Confidence: 0.815939843654633

 $00:55:53.459 \longrightarrow 00:55:56.951$  information and I can get a copy of your

NOTE Confidence: 0.815939843654633

 $00{:}55{:}56.951 \dashrightarrow 00{:}56{:}00.355$  book and maybe send a link out to that.

NOTE Confidence: 0.815939843654633

00:56:00.360 --> 00:56:01.780 Basically there's only one Fatima,

NOTE Confidence: 0.815939843654633

00:56:01.780 --> 00:56:03.768 Cody Stanford, so if you Google that

NOTE Confidence: 0.815939843654633

 $00:56:03.768 \longrightarrow 00:56:06.037$  you will find my step one review book,

NOTE Confidence: 0.815939843654633

 $00{:}56{:}06.040 \dashrightarrow 00{:}56{:}08.028$  but you guys have all passed step

NOTE Confidence: 0.815939843654633

 $00:56:08.028 \longrightarrow 00:56:09.750$  one so don't buy that one.

NOTE Confidence: 0.815939843654633

 $00:56:09.750 \longrightarrow 00:56:12.510$  Like this, never do later.

00:56:12.510 --> 00:56:13.971 If you great,

NOTE Confidence: 0.815939843654633

00:56:13.971 --> 00:56:18.580 thank you so much again and for everybody.

NOTE Confidence: 0.815939843654633

 $00{:}56{:}18.580 \dashrightarrow 00{:}56{:}21.898$  Let me highlight next week talk.

NOTE Confidence: 0.815939843654633

 $00:56:21.900 \longrightarrow 00:56:24.324$  We're going to have a talk by Caroline

NOTE Confidence: 0.815939843654633

 $00:56:24.324 \longrightarrow 00:56:26.637$  Okorie who is a clinical assistant

NOTE Confidence: 0.815939843654633

00:56:26.637 --> 00:56:28.273 professor of pediatric pulmonary

NOTE Confidence: 0.815939843654633

 $00{:}56{:}28.273 \dashrightarrow 00{:}56{:}30.459$  and Sleep Medicine at Stanford.

NOTE Confidence: 0.815939843654633

 $00:56:30.460 \longrightarrow 00:56:32.494$  She's going to be speaking about

NOTE Confidence: 0.815939843654633

 $00:56:32.494 \longrightarrow 00:56:33.850$  sleep concerns in pediatric

NOTE Confidence: 0.815939843654633

 $00:56:33.908 \longrightarrow 00:56:35.660$  populations with special needs.

NOTE Confidence: 0.815939843654633

 $00{:}56{:}35.660 \dashrightarrow 00{:}56{:}37.898$  So Mark your calendars for that.

NOTE Confidence: 0.81593984365463300:56:37.900 --> 00:56:38.640 And also. NOTE Confidence: 0.877285242080688

 $00:56:51.250 \longrightarrow 00:56:52.629$  Well, I guess I think we're leaving.

NOTE Confidence: 0.877285242080688

 $00:56:52.630 \longrightarrow 00:56:53.806$  I think more may have left.

NOTE Confidence: 0.877285242080688

00:56:53.810 --> 00:56:54.944 Thanks so much for attending and

NOTE Confidence: 0.877285242080688

 $00:56:54.944 \longrightarrow 00:56:56.370$  I wish you guys a wonderful day.

 $00:56:56.370 \longrightarrow 00:56:58.320$  Thanks so much.

NOTE Confidence: 0.877285242080688

 $00:56:58.320 \longrightarrow 00:57:00.756$  Bye bye take care thank you.

NOTE Confidence: 0.877285242080688

 $00{:}57{:}00.760 \dashrightarrow 00{:}57{:}02.630$  Thanks for good question. Right?