

WEBVTT

NOTE duration:"00:57:07.8720000"

NOTE language:en-us

NOTE Confidence: 0.82285076379776

00:00:00.000 --> 00:00:02.768 18 and a half us considered to be

NOTE Confidence: 0.82285076379776

00:00:02.768 --> 00:00:04.639 within normal weight status when

NOTE Confidence: 0.82285076379776

00:00:04.639 --> 00:00:07.660 their BMI is between 18 1/2 and 24.9,

NOTE Confidence: 0.82285076379776

00:00:07.660 --> 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 --> 00:00:15.288 and then we get into those

NOTE Confidence: 0.82285076379776

00:00:15.288 --> 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 --> 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 --> 00:00:28.148 obesity and those that have severe

NOTE Confidence: 0.82285076379776

00:00:28.148 --> 00:00:30.223 remember not morbid severe obesity.

NOTE Confidence: 0.82285076379776

00:00:30.230 --> 00:00:32.885 A BMI of greater than or equal to 40.

NOTE Confidence: 0.82285076379776

00:00:32.890 --> 00:00:34.818 Now this is when we're going to really

NOTE Confidence: 0.82285076379776

00:00:34.818 --> 00:00:37.019 get down and dirty and looking at

NOTE Confidence: 0.82285076379776

00:00:37.019 --> 00:00:38.684 obesity because unfortunately in medical

NOTE Confidence: 0.82285076379776

00:00:38.742 --> 00:00:40.252 school and residency and fellowship

NOTE Confidence: 0.82285076379776

00:00:40.252 --> 00:00:42.604 we were not taught very much about obesity.

NOTE Confidence: 0.82285076379776

00:00:42.604 --> 00:00:45.539 But what we were taught was that it was just

NOTE Confidence: 0.82285076379776

00:00:45.539 --> 00:00:47.393 a simple simple energy balance equation.

NOTE Confidence: 0.82285076379776

00:00:47.400 --> 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 --> 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 --> 00:00:56.522 your physical activity and if we could just

NOTE Confidence: 0.82285076379776

00:00:56.522 --> 00:00:58.935 get this all balanced just the right way.

NOTE Confidence: 0.82285076379776

00:00:58.940 --> 00:01:01.112 We all should be just exactly

NOTE Confidence: 0.82285076379776

00:01:01.112 --> 00:01:03.510 the size that we want to be.

NOTE Confidence: 0.82285076379776

00:01:03.510 --> 00:01:05.393 But what we do know is that  
NOTE Confidence: 0.82285076379776

00:01:05.393 --> 00:01:06.910 this is indeed a fallacy.  
NOTE Confidence: 0.82285076379776

00:01:06.910 --> 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 --> 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 --> 00:01:15.380 Our patients will continue to fill to make  
NOTE Confidence: 0.82285076379776

00:01:15.380 --> 00:01:17.084 any progress with this disease process.  
NOTE Confidence: 0.82285076379776

00:01:17.090 --> 00:01:19.162 So we'll learn about this disease process  
NOTE Confidence: 0.82285076379776

00:01:19.162 --> 00:01:21.616 and want to tell you where to start it.  
NOTE Confidence: 0.82285076379776

00:01:21.620 --> 00:01:22.442 Very elementary level.  
NOTE Confidence: 0.82285076379776

00:01:22.442 --> 00:01:24.360 We're going to work our way up  
NOTE Confidence: 0.82285076379776

00:01:24.414 --> 00:01:26.297 to very PhD level in terms of  
NOTE Confidence: 0.82285076379776

00:01:26.297 --> 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

NOTE Confidence: 0.82285076379776  
00:01:30.204 --> 00:01:32.010 grade before looking at what we  
NOTE Confidence: 0.82285076379776  
00:01:32.010 --> 00:01:33.770 do individually for our patients.  
NOTE Confidence: 0.82285076379776  
00:01:33.770 --> 00:01:35.540 So here we are in Kindergarten  
NOTE Confidence: 0.82285076379776  
00:01:35.540 --> 00:01:36.720 School is in session,  
NOTE Confidence: 0.82285076379776  
00:01:36.720 --> 00:01:38.904 so on this left side of the screen  
NOTE Confidence: 0.82285076379776  
00:01:38.904 --> 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 --> 00:01:45.562 the screen we can see this much  
NOTE Confidence: 0.82285076379776  
00:01:45.570 --> 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 --> 00:01:50.212 accelerate cetera and notice that  
NOTE Confidence: 0.82285076379776  
00:01:50.212 --> 00:01:52.310 the title of the slide says all  
NOTE Confidence: 0.82285076379776  
00:01:52.310 --> 00:01:53.538 calories aren't created equal.  
NOTE Confidence: 0.82285076379776

00:01:53.540 --> 00:01:55.860 So I can tell you that every new  
NOTE Confidence: 0.82285076379776

00:01:55.860 --> 00:01:57.866 patient visit I start off with this  
NOTE Confidence: 0.82285076379776

00:01:57.866 --> 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 --> 00:02:04.189 the left side of the screen on the  
NOTE Confidence: 0.82285076379776

00:02:04.189 --> 00:02:06.000 order of about 350 kilocalories.  
NOTE Confidence: 0.82285076379776

00:02:06.000 --> 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 --> 00:02:11.436 maybe healthier set of foods,  
NOTE Confidence: 0.82285076379776

00:02:11.440 --> 00:02:12.220 about 700 calories.  
NOTE Confidence: 0.82285076379776

00:02:12.220 --> 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 --> 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 --> 00:02:19.703 what about the fact that I told

NOTE Confidence: 0.82285076379776

00:02:19.703 --> 00:02:21.605 you it was about double the amount

NOTE Confidence: 0.82285076379776

00:02:21.605 --> 00:02:23.085 of calories in every level?

NOTE Confidence: 0.82285076379776

00:02:23.090 --> 00:02:24.910 This this one is healthier and I

NOTE Confidence: 0.82285076379776

00:02:24.910 --> 00:02:26.821 asked him to explain why I think

NOTE Confidence: 0.82285076379776

00:02:26.821 --> 00:02:28.957 we can all agree that this is a

NOTE Confidence: 0.82285076379776

00:02:28.957 --> 00:02:30.853 healthier fear and so I can tell you

NOTE Confidence: 0.865599513053894

00:02:30.860 --> 00:02:32.180 that with none of my patients

NOTE Confidence: 0.865599513053894

00:02:32.180 --> 00:02:34.021 do I ever ask them about the

NOTE Confidence: 0.865599513053894

00:02:34.021 --> 00:02:35.526 number of calories there eating.

NOTE Confidence: 0.865599513053894

00:02:35.530 --> 00:02:37.448 What matters is whether they are processed.

NOTE Confidence: 0.865599513053894

00:02:37.450 --> 00:02:40.066 Or not, there was a lovely study that

NOTE Confidence: 0.865599513053894

00:02:40.066 --> 00:02:42.906 was run by Kevin Hall out of the NIH,

NOTE Confidence: 0.865599513053894

00:02:42.910 --> 00:02:45.017 where he looked at Adlib thieves and

NOTE Confidence: 0.865599513053894

00:02:45.017 --> 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

NOTE Confidence: 0.865599513053894

00:02:49.063 --> 00:02:51.000 the use of idle process consumption  
NOTE Confidence: 0.865599513053894

00:02:51.000 --> 00:02:52.826 of food versus a more virtuous  
NOTE Confidence: 0.865599513053894

00:02:52.826 --> 00:02:54.828 fair like you see on the right  
NOTE Confidence: 0.865599513053894

00:02:54.828 --> 00:02:57.255 side of the screen and what he saw  
NOTE Confidence: 0.865599513053894

00:02:57.255 --> 00:02:59.283 overtime was that even though Clore  
NOTE Confidence: 0.865599513053894

00:02:59.283 --> 00:03:01.198 consumption was about the same,  
NOTE Confidence: 0.865599513053894

00:03:01.200 --> 00:03:03.720 the weight tended to go down and individuals  
NOTE Confidence: 0.865599513053894

00:03:03.720 --> 00:03:06.018 that ate this fear compared to this,  
NOTE Confidence: 0.865599513053894

00:03:06.020 --> 00:03:07.645 even though the chloric value  
NOTE Confidence: 0.865599513053894

00:03:07.645 --> 00:03:08.620 was almost identical.  
NOTE Confidence: 0.865599513053894

00:03:08.620 --> 00:03:11.700 So that's important for us to recognize.  
NOTE Confidence: 0.865599513053894

00:03:11.700 --> 00:03:14.588 So we do know that obesity is a  
NOTE Confidence: 0.865599513053894

00:03:14.588 --> 00:03:16.359 multifactorial disorder where genetics,  
NOTE Confidence: 0.865599513053894

00:03:16.360 --> 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 --> 00:03:21.919 a role in a person's likelihood of

NOTE Confidence: 0.865599513053894  
00:03:21.919 --> 00:03:24.284 having this disease of obesity.  
NOTE Confidence: 0.865599513053894  
00:03:24.290 --> 00:03:26.322 Now this is when we get into the  
NOTE Confidence: 0.865599513053894  
00:03:26.322 --> 00:03:28.203 nitty gritty of really looking at  
NOTE Confidence: 0.865599513053894  
00:03:28.203 --> 00:03:29.838 the complexity of this disease.  
NOTE Confidence: 0.865599513053894  
00:03:29.840 --> 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 --> 00:03:36.940 I'm going to look at be if we kind of  
NOTE Confidence: 0.865599513053894  
00:03:37.009 --> 00:03:39.321 took us a cross section of the brain  
NOTE Confidence: 0.865599513053894  
00:03:39.321 --> 00:03:41.809 and get to the central portion here,  
NOTE Confidence: 0.865599513053894  
00:03:41.810 --> 00:03:43.819 we will get to the hypothalamus right  
NOTE Confidence: 0.865599513053894  
00:03:43.819 --> 00:03:45.609 in the hypothalamus is getting signals  
NOTE Confidence: 0.865599513053894  
00:03:45.609 --> 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 --> 00:03:51.151 food and storage of food is getting  
NOTE Confidence: 0.865599513053894

00:03:51.151 --> 00:03:52.909 left in from our adipose tissue.  
NOTE Confidence: 0.865599513053894

00:03:52.910 --> 00:03:54.680 Peptide YY from our large intestine.  
NOTE Confidence: 0.865599513053894

00:03:54.680 --> 00:03:56.240 Cholecyst again in from our  
NOTE Confidence: 0.865599513053894

00:03:56.240 --> 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 --> 00:03:59.997 from the pancreas grilling from the stomach.  
NOTE Confidence: 0.865599513053894

00:04:00.000 --> 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 --> 00:04:05.945 tell us not only how much to eat,  
NOTE Confidence: 0.865599513053894

00:04:05.950 --> 00:04:08.446 but to tell us how much to store.  
NOTE Confidence: 0.865599513053894

00:04:08.450 --> 00:04:10.664 Now let's look at these substances  
NOTE Confidence: 0.865599513053894

00:04:10.664 --> 00:04:12.720 in a little more detail.  
NOTE Confidence: 0.865599513053894

00:04:12.720 --> 00:04:15.258 So that we can see what the substances are,  
NOTE Confidence: 0.865599513053894

00:04:15.260 --> 00:04:16.670 where they are being produced,  
NOTE Confidence: 0.865599513053894

00:04:16.670 --> 00:04:18.075 and what their relevant effect  
NOTE Confidence: 0.865599513053894

00:04:18.075 --> 00:04:18.918 on feeding are.

NOTE Confidence: 0.865599513053894  
00:04:18.920 --> 00:04:20.630 So let's look at grilling so  
NOTE Confidence: 0.865599513053894  
00:04:20.630 --> 00:04:22.030 we can see Grill in.  
NOTE Confidence: 0.865599513053894  
00:04:22.030 --> 00:04:23.934 Here is being produced in the stomach  
NOTE Confidence: 0.865599513053894  
00:04:23.934 --> 00:04:26.064 in the fundus region of the stomach and  
NOTE Confidence: 0.865599513053894  
00:04:26.064 --> 00:04:28.229 also in the Inter and endocrine cells.  
NOTE Confidence: 0.865599513053894  
00:04:28.230 --> 00:04:29.922 It's also being produced in the  
NOTE Confidence: 0.865599513053894  
00:04:29.922 --> 00:04:31.050 neurons in the hypothalamus.  
NOTE Confidence: 0.865599513053894  
00:04:31.050 --> 00:04:33.378 You can see that it's relevant effect on  
NOTE Confidence: 0.865599513053894  
00:04:33.378 --> 00:04:35.555 feeding is that it is all rexha genic,  
NOTE Confidence: 0.865599513053894  
00:04:35.560 --> 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 --> 00:04:40.799 which are produced in the small intestine,  
NOTE Confidence: 0.865599513053894  
00:04:40.800 --> 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 --> 00:04:46.429 to stimulate our appetite.  
NOTE Confidence: 0.865599513053894

00:04:46.430 --> 00:04:47.594 Insulin, of course,  
NOTE Confidence: 0.865599513053894

00:04:47.594 --> 00:04:49.534 we're talking bout endogenous insulin  
NOTE Confidence: 0.865599513053894

00:04:49.534 --> 00:04:51.657 here producing the beta cells in the  
NOTE Confidence: 0.865599513053894

00:04:51.657 --> 00:04:53.709 islets of Langerhans 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 --> 00:04:57.020 is that it is anorexigenic,  
NOTE Confidence: 0.865599513053894

00:04:57.020 --> 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 --> 00:05:01.342 this responsible for both glycogen  
NOTE Confidence: 0.865599513053894

00:05:01.342 --> 00:05:02.979 and lipid storage left in,  
NOTE Confidence: 0.865599513053894

00:05:02.980 --> 00:05:05.360 which in the short term is produced  
NOTE Confidence: 0.865599513053894

00:05:05.360 --> 00:05:07.608 in the stomach in the long term,  
NOTE Confidence: 0.865599513053894

00:05:07.610 --> 00:05:07.931 and.  
NOTE Confidence: 0.865599513053894

00:05:07.931 --> 00:05:09.536 The Alpha cells or fat  
NOTE Confidence: 0.865599513053894

00:05:09.536 --> 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,

NOTE Confidence: 0.77294153325698

00:05:13.190 --> 00:05:14.750 which means that it promotes

NOTE Confidence: 0.77294153325698

00:05:14.750 --> 00:05:16.684 satiety CCK or Cholecyst Acain and

NOTE Confidence: 0.77294153325698

00:05:16.684 --> 00:05:18.269 produced in the small intestine

NOTE Confidence: 0.77294153325698

00:05:18.269 --> 00:05:20.020 is responsible for early satiety.

NOTE Confidence: 0.77294153325698

00:05:20.020 --> 00:05:22.218 This is when you get full very

NOTE Confidence: 0.77294153325698

00:05:22.218 --> 00:05:23.920 quickly is also of course,

NOTE Confidence: 0.77294153325698

00:05:23.920 --> 00:05:26.062 responsible for the release of digestive

NOTE Confidence: 0.77294153325698

00:05:26.062 --> 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 --> 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 --> 00:05:36.270 peptide tyrosine tyrosine produced in

NOTE Confidence: 0.77294153325698

00:05:36.270 --> 00:05:38.606 the distal portion of the small intestine.

NOTE Confidence: 0.77294153325698

00:05:38.610 --> 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

NOTE Confidence: 0.77294153325698

00:05:42.745 --> 00:05:44.830 feeding is that it is anorexigenic,  
NOTE Confidence: 0.77294153325698

00:05:44.830 --> 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 --> 00:05:50.430 leptin in the subsequent slide,  
NOTE Confidence: 0.77294153325698

00:05:50.430 --> 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 --> 00:05:56.029 food intake in food storage.  
NOTE Confidence: 0.77294153325698

00:05:56.030 --> 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 --> 00:06:01.940 by which one may signal.  
NOTE Confidence: 0.77294153325698

00:06:01.940 --> 00:06:03.806 We're going to focus on this  
NOTE Confidence: 0.77294153325698

00:06:03.806 --> 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 --> 00:06:07.570 which is signaling from the  
NOTE Confidence: 0.77294153325698

00:06:07.570 --> 00:06:08.859 adipocytes or fat cells.  
NOTE Confidence: 0.77294153325698

00:06:08.860 --> 00:06:10.830 Binds to Receptor and stimulates

NOTE Confidence: 0.77294153325698  
00:06:10.830 --> 00:06:13.464 what's called the Palm C or  
NOTE Confidence: 0.77294153325698  
00:06:13.464 --> 00:06:15.228 the proopiomelanocortin neuron.  
NOTE Confidence: 0.77294153325698  
00:06:15.230 --> 00:06:17.505 Here in the arcuate nucleus  
NOTE Confidence: 0.77294153325698  
00:06:17.505 --> 00:06:18.870 of the hypothalamus.  
NOTE Confidence: 0.77294153325698  
00:06:18.870 --> 00:06:20.690 When this neuron fires,  
NOTE Confidence: 0.77294153325698  
00:06:20.690 --> 00:06:22.965 Alpha Milana site stimulating hormones,  
NOTE Confidence: 0.77294153325698  
00:06:22.970 --> 00:06:25.240 then bind toward called Milan.  
NOTE Confidence: 0.77294153325698  
00:06:25.240 --> 00:06:27.340 According for receptors and you  
NOTE Confidence: 0.77294153325698  
00:06:27.340 --> 00:06:30.455 can see that this leads to the  
NOTE Confidence: 0.77294153325698  
00:06:30.455 --> 00:06:33.251 production of BDNF which is brain  
NOTE Confidence: 0.77294153325698  
00:06:33.251 --> 00:06:34.800 derived neurotrophic factor.  
NOTE Confidence: 0.77294153325698  
00:06:34.800 --> 00:06:36.660 This releases an anorexigenic  
NOTE Confidence: 0.77294153325698  
00:06:36.660 --> 00:06:39.450 signal and what happens to patients  
NOTE Confidence: 0.77294153325698  
00:06:39.530 --> 00:06:41.680 that travel down this pathway?  
NOTE Confidence: 0.77294153325698  
00:06:41.680 --> 00:06:44.280 As they have a lower intake of food  
NOTE Confidence: 0.77294153325698

00:06:44.280 --> 00:06:46.745 and they have a lower intake of  
NOTE Confidence: 0.77294153325698

00:06:46.745 --> 00:06:49.450 storage of the food that they do eat,  
NOTE Confidence: 0.77294153325698

00:06:49.450 --> 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 --> 00:07:00.165 and obesity and travel down an  
NOTE Confidence: 0.77294153325698

00:07:00.165 --> 00:07:01.715 alternative pathway were left in  
NOTE Confidence: 0.77294153325698

00:07:01.715 --> 00:07:03.684 bind to an alternative receptor and  
NOTE Confidence: 0.77294153325698

00:07:03.684 --> 00:07:06.015 stimulates a different neuron in the brain.  
NOTE Confidence: 0.77294153325698

00:07:06.020 --> 00:07:08.379 This is called agouti related peptide neuron.  
NOTE Confidence: 0.77294153325698

00:07:08.380 --> 00:07:10.450 This is here in the paraventricular  
NOTE Confidence: 0.77294153325698

00:07:10.450 --> 00:07:11.830 nucleus of the hypothalamus.  
NOTE Confidence: 0.77294153325698

00:07:11.830 --> 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 --> 00:07:18.038 instead to the plan according receptors

NOTE Confidence: 0.77294153325698

00:07:18.038 --> 00:07:20.288 and inhibit the formation of BDNF

NOTE Confidence: 0.77294153325698

00:07:20.288 --> 00:07:22.083 or brain derived neurotrophic factor

NOTE Confidence: 0.77294153325698

00:07:22.083 --> 00:07:24.190 and what happens is these patients

NOTE Confidence: 0.77294153325698

00:07:24.190 --> 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 --> 00:07:30.480 it also increases storage so it's

NOTE Confidence: 0.77294153325698

00:07:30.480 --> 00:07:32.452 actually something wrong with the

NOTE Confidence: 0.77294153325698

00:07:32.452 --> 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 --> 00:07:39.440 how you could eat one meal and someone

NOTE Confidence: 0.77294153325698

00:07:39.440 --> 00:07:42.280 else can eat the same Milan they store.

NOTE Confidence: 0.77294153325698

00:07:42.280 --> 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 --> 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.

NOTE Confidence: 0.843638598918915

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 --> 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 --> 00:08:01.539 OK, so we want our diet to look more  
NOTE Confidence: 0.843638598918915

00:08:01.539 --> 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 --> 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 --> 00:08:13.909 not putting you on a fad diet that will  
NOTE Confidence: 0.843638598918915

00:08:13.909 --> 00:08:16.810 last kind of with the blink of an eye.  
NOTE Confidence: 0.843638598918915

00:08:16.810 --> 00:08:17.875 We want sustainability.  
NOTE Confidence: 0.843638598918915

00:08:17.875 --> 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 --> 00:08:22.818 a role in weight regulation,

NOTE Confidence: 0.843638598918915  
00:08:22.820 --> 00:08:25.204 but what we are often selling to patients  
NOTE Confidence: 0.843638598918915  
00:08:25.204 --> 00:08:27.408 is often the incorrect information.  
NOTE Confidence: 0.843638598918915  
00:08:27.410 --> 00:08:30.082 So we tell people to exercise and exercise  
NOTE Confidence: 0.843638598918915  
00:08:30.082 --> 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 --> 00:08:37.766 terms of what we expect with regards  
NOTE Confidence: 0.843638598918915  
00:08:37.766 --> 00:08:39.766 to weight regulation from exercise.  
NOTE Confidence: 0.843638598918915  
00:08:39.770 --> 00:08:41.882 One average exercise leads to weight  
NOTE Confidence: 0.843638598918915  
00:08:41.882 --> 00:08:43.632 stability, not significant weight loss.  
NOTE Confidence: 0.843638598918915  
00:08:43.632 --> 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 --> 00:08:53.587 it helps us to promote weight stability.  
NOTE Confidence: 0.843638598918915  
00:08:53.590 --> 00:08:55.910 So we want to sell that as the  
NOTE Confidence: 0.843638598918915

00:08:55.910 --> 00:08:57.537 accurate message of what physical  
NOTE Confidence: 0.843638598918915

00:08:57.537 --> 00:08:59.826 activity does as it relates to wait.  
NOTE Confidence: 0.843638598918915

00:08:59.830 --> 00:09:00.412 Of course,  
NOTE Confidence: 0.843638598918915

00:09:00.412 --> 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 --> 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 --> 00:09:12.562 quality and duration definitely plays  
NOTE Confidence: 0.843638598918915

00:09:12.562 --> 00:09:14.991 a large role in how the body regulates.  
NOTE Confidence: 0.843638598918915

00:09:14.991 --> 00:09:16.593 Wait there complete half ways that  
NOTE Confidence: 0.843638598918915

00:09:16.593 --> 00:09:18.298 talk about how the suprachiasmatic  
NOTE Confidence: 0.843638598918915

00:09:18.298 --> 00:09:19.690 nucleus interferes with hypothalamic  
NOTE Confidence: 0.843638598918915

00:09:19.690 --> 00:09:20.800 control of feeding.

NOTE Confidence: 0.843638598918915

00:09:20.800 --> 00:09:23.257 That really is suggests that the quality

NOTE Confidence: 0.843638598918915

00:09:23.257 --> 00:09:25.876 of 1 sleep can be drastically affected

NOTE Confidence: 0.843638598918915

00:09:25.876 --> 00:09:29.010 an if the quality of sleep is affected.

NOTE Confidence: 0.843638598918915

00:09:29.010 --> 00:09:30.870 It affects the feeding behaviors,

NOTE Confidence: 0.843638598918915

00:09:30.870 --> 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 --> 00:09:36.838 It is estimated that approximately 20%

NOTE Confidence: 0.843638598918915

00:09:36.840 --> 00:09:39.848 of the issues that we have in this

NOTE Confidence: 0.843638598918915

00:09:39.848 --> 00:09:42.065 country related to obesity are indeed

NOTE Confidence: 0.843638598918915

00:09:42.065 --> 00:09:45.049 do two things that we do is doctors.

NOTE Confidence: 0.843638598918915

00:09:45.050 --> 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 --> 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,

NOTE Confidence: 0.843638598918915

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 --> 00:09:55.456 Long term.  
NOTE Confidence: 0.843638598918915

00:09:55.456 --> 00:09:57.604 Prednisone beta blockers I VF medications.  
NOTE Confidence: 0.843638598918915

00:09:57.610 --> 00:09:59.400 Just name a few antihistamines.  
NOTE Confidence: 0.843638598918915

00:09:59.400 --> 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 --> 00:10:06.318 so we want to be mindful of the  
NOTE Confidence: 0.843638598918915

00:10:06.318 --> 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 --> 00:10:11.968 weight and weight regulation issues.  
NOTE Confidence: 0.855165660381317

00:10:14.250 --> 00:10:15.852 This looks like another sweet picture  
NOTE Confidence: 0.855165660381317

00:10:15.852 --> 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 --> 00:10:22.440 but this is a different sleeping  
NOTE Confidence: 0.855165660381317

00:10:22.440 --> 00:10:24.374 or this is looking at a gentleman

NOTE Confidence: 0.855165660381317  
00:10:24.374 --> 00:10:26.138 that sleeping during the daytime so  
NOTE Confidence: 0.855165660381317  
00:10:26.138 --> 00:10:27.448 circadian rhythm disturbances also  
NOTE Confidence: 0.855165660381317  
00:10:27.448 --> 00:10:29.374 can affect how the body regulates.  
NOTE Confidence: 0.855165660381317  
00:10:29.380 --> 00:10:31.880 Wait for some of us, we may be nocturnist  
NOTE Confidence: 0.855165660381317  
00:10:31.880 --> 00:10:34.618 and so we may have to work night shifts.  
NOTE Confidence: 0.855165660381317  
00:10:34.620 --> 00:10:35.493 Many nurses also.  
NOTE Confidence: 0.855165660381317  
00:10:35.493 --> 00:10:36.657 I'm in other professions.  
NOTE Confidence: 0.855165660381317  
00:10:36.660 --> 00:10:38.105 Unfortunately the brain doesn't like  
NOTE Confidence: 0.855165660381317  
00:10:38.105 --> 00:10:40.150 to really be awake in the middle.  
NOTE Confidence: 0.855165660381317  
00:10:40.150 --> 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 --> 00:10:46.320 both in Connecticut here in Boston.  
NOTE Confidence: 0.855165660381317  
00:10:46.320 --> 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  
NOTE Confidence: 0.855165660381317

00:10:52.863 --> 00:10:54.574 store more adipose and store more  
NOTE Confidence: 0.855165660381317

00:10:54.574 --> 00:10:56.698 fat and so sometimes it's as simple  
NOTE Confidence: 0.855165660381317

00:10:56.698 --> 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 --> 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 --> 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 --> 00:11:09.066 but this does play a large role  
NOTE Confidence: 0.855165660381317

00:11:09.066 --> 00:11:11.102 in how the central nervous system  
NOTE Confidence: 0.855165660381317

00:11:11.102 --> 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 --> 00:11:15.488 I don't anticipate that you guys will  
NOTE Confidence: 0.855165660381317

00:11:15.488 --> 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 --> 00:11:21.200 because it shows the complexity of

NOTE Confidence: 0.855165660381317

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

NOTE Confidence: 0.855165660381317

00:11:22.982 --> 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 --> 00:11:27.368 which we disproved earlier.

NOTE Confidence: 0.855165660381317

00:11:27.368 --> 00:11:30.156 And So what you can see here are that

NOTE Confidence: 0.855165660381317

00:11:30.156 --> 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 --> 00:11:36.628 Things that are outside of a person

NOTE Confidence: 0.855165660381317

00:11:36.628 --> 00:11:38.478 that may lead to weight gain.

NOTE Confidence: 0.855165660381317

00:11:38.480 --> 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 --> 00:11:44.289 and then here in this bottom row.

NOTE Confidence: 0.855165660381317

00:11:44.290 --> 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 --> 00:11:48.892 middle we have things that affect

NOTE Confidence: 0.855165660381317

00:11:48.892 --> 00:11:50.230 either intake or expenditure or  
NOTE Confidence: 0.855165660381317

00:11:50.230 --> 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 --> 00:11:59.282 there are different colors on the  
NOTE Confidence: 0.855165660381317

00:11:59.282 --> 00:12:00.912 screen that actually means something in  
NOTE Confidence: 0.855165660381317

00:12:00.912 --> 00:12:02.287 these are contributors or influencers  
NOTE Confidence: 0.855165660381317

00:12:02.287 --> 00:12:03.930 to our weight and weight status.  
NOTE Confidence: 0.855165660381317

00:12:03.930 --> 00:12:06.171 We're going to look at this in a little  
NOTE Confidence: 0.855165660381317

00:12:06.171 --> 00:12:08.227 bit more detail in the next slide.  
NOTE Confidence: 0.848095178604126

00:12:10.900 --> 00:12:12.380 So the contributors and influencers  
NOTE Confidence: 0.848095178604126

00:12:12.380 --> 00:12:14.268 to obesity are as follows their  
NOTE Confidence: 0.848095178604126

00:12:14.268 --> 00:12:15.668 biological or medical reasons.

NOTE Confidence: 0.848095178604126

00:12:15.670 --> 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 --> 00:12:27.961 things from these categories just

NOTE Confidence: 0.848095178604126

00:12:27.961 --> 00:12:30.619 to get a sense of what's going on.

NOTE Confidence: 0.848095178604126

00:12:30.620 --> 00:12:32.468 And we're looking now at contribute

NOTE Confidence: 0.848095178604126

00:12:32.468 --> 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 --> 00:12:39.197 we'd be here for the rest of today,

NOTE Confidence: 0.848095178604126

00:12:39.200 --> 00:12:42.125 but let's just look at a few of these.

NOTE Confidence: 0.848095178604126

00:12:42.130 --> 00:12:44.377 Things that may increase intake are hyper

NOTE Confidence: 0.848095178604126

00:12:44.377 --> 00:12:45.860 reactivity to environmental food cues,  
NOTE Confidence: 0.848095178604126

00:12:45.860 --> 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 --> 00:12:52.950 and I passed by it and I'm like I don't  
NOTE Confidence: 0.848095178604126

00:12:53.015 --> 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 --> 00:12:59.645 and then disordered eating things that  
NOTE Confidence: 0.848095178604126

00:12:59.645 --> 00:13:01.375 may decrease expenditure or issues  
NOTE Confidence: 0.848095178604126

00:13:01.375 --> 00:13:03.279 like changes in the gut microbiota.  
NOTE Confidence: 0.848095178604126

00:13:03.280 --> 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 --> 00:13:09.175 versus those that have obesity differ  
NOTE Confidence: 0.848095178604126

00:13:09.238 --> 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 --> 00:13:15.460 So much so that some of the studies

NOTE Confidence: 0.848095178604126

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

NOTE Confidence: 0.848095178604126

00:13:17.690 --> 00:13:19.883 are really to ascertain exactly what

NOTE Confidence: 0.848095178604126

00:13:19.883 --> 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 --> 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 --> 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 --> 00:13:37.080 they started to gain weight and so

NOTE Confidence: 0.848095178604126

00:13:37.080 --> 00:13:39.193 one of our lead investigators on

NOTE Confidence: 0.848095178604126

00:13:39.193 --> 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 --> 00:13:46.200 who's studying this in more detail.

NOTE Confidence: 0.848095178604126

00:13:46.200 --> 00:13:48.685 To really figure out how we might be  
NOTE Confidence: 0.848095178604126

00:13:48.685 --> 00:13:51.141 able to use this as Therapeutics when we  
NOTE Confidence: 0.848095178604126

00:13:51.205 --> 00:13:53.900 look at the gut microbiota thermal Genesis,  
NOTE Confidence: 0.848095178604126

00:13:53.900 --> 00:13:56.175 we talked about a little bit earlier,  
NOTE Confidence: 0.848095178604126

00:13:56.180 --> 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 --> 00:13:59.752 obviously that decreases expenditure.  
NOTE Confidence: 0.848095178604126

00:13:59.752 --> 00:14:01.044 Things that increase intake  
NOTE Confidence: 0.848095178604126

00:14:01.044 --> 00:14:02.381 and decrease expenditure are  
NOTE Confidence: 0.848095178604126

00:14:02.381 --> 00:14:03.677 genetic and epigenetic factors.  
NOTE Confidence: 0.848095178604126

00:14:03.680 --> 00:14:06.371 And here I'd like to pause and say it's  
NOTE Confidence: 0.848095178604126

00:14:06.371 --> 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 --> 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 --> 00:14:16.806 so we know that the genetic contribution.

NOTE Confidence: 0.848095178604126

00:14:16.810 --> 00:14:17.719 From our parents.

NOTE Confidence: 0.848095178604126

00:14:17.719 --> 00:14:19.537 In terms of our weight status

NOTE Confidence: 0.848095178604126

00:14:19.537 --> 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 --> 00:14:30.330 the order of 50 to 85% likelihood,

NOTE Confidence: 0.848095178604126

00:14:30.330 --> 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 --> 00:14:38.610 don't feed processed foods, etc.

NOTE Confidence: 0.848095178604126

00:14:38.610 --> 00:14:40.338 So it's important for us to

NOTE Confidence: 0.848095178604126

00:14:40.338 --> 00:14:41.980 recognize that age related changes.

NOTE Confidence: 0.848095178604126

00:14:41.980 --> 00:14:43.208 Age related changes are

NOTE Confidence: 0.848095178604126

00:14:43.208 --> 00:14:44.436 particularly important for women.  
NOTE Confidence: 0.848095178604126

00:14:44.440 --> 00:14:45.970 There are three primary times  
NOTE Confidence: 0.848095178604126

00:14:45.970 --> 00:14:47.874 doing a woman's life, by which.  
NOTE Confidence: 0.848095178604126

00:14:47.874 --> 00:14:49.222 Should significant hormonal changes  
NOTE Confidence: 0.848095178604126

00:14:49.222 --> 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 --> 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 --> 00:15:00.800 the third stage of Life which is in  
NOTE Confidence: 0.797860264778137

00:15:00.800 --> 00:15:02.670 the period post menopausal phase.  
NOTE Confidence: 0.797860264778137

00:15:02.670 --> 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 --> 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 --> 00:15:12.765 typically in the subcu tissue

NOTE Confidence: 0.797860264778137  
00:15:12.765 --> 00:15:14.722 to more of a central adipose  
NOTE Confidence: 0.797860264778137  
00:15:14.722 --> 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 --> 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 --> 00:15:23.728 Julie to increase intake  
NOTE Confidence: 0.797860264778137  
00:15:23.728 --> 00:15:25.699 and decrease expenditure.  
NOTE Confidence: 0.797860264778137  
00:15:25.700 --> 00:15:27.470 Things that happen outside of a  
NOTE Confidence: 0.797860264778137  
00:15:27.470 --> 00:15:29.780 person that may lead to obesity or  
NOTE Confidence: 0.797860264778137  
00:15:29.780 --> 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 --> 00:15:35.078 advertising in large portion sizes.  
NOTE Confidence: 0.797860264778137  
00:15:35.080 --> 00:15:37.090 Those are things we've always heard,  
NOTE Confidence: 0.797860264778137  
00:15:37.090 --> 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,  
NOTE Confidence: 0.797860264778137

00:15:40.440 --> 00:15:41.640 and labor saving devices,  
NOTE Confidence: 0.797860264778137

00:15:41.640 --> 00:15:43.440 and then things that may increase  
NOTE Confidence: 0.797860264778137

00:15:43.499 --> 00:15:45.127 intake and decrease expenditure.  
NOTE Confidence: 0.797860264778137

00:15:45.130 --> 00:15:47.475 Things like stress with that chronic stress.  
NOTE Confidence: 0.797860264778137

00:15:47.480 --> 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 --> 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 --> 00:16:00.956 And as we mentioned earlier,  
NOTE Confidence: 0.797860264778137

00:16:00.960 --> 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 --> 00:16:06.400 and paternal obesity,  
NOTE Confidence: 0.797860264778137

00:16:06.400 --> 00:16:08.808 this is by design that I would begin

NOTE Confidence: 0.797860264778137

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

NOTE Confidence: 0.797860264778137

00:16:11.120 --> 00:16:13.136 and this is the concept is that

NOTE Confidence: 0.797860264778137

00:16:13.136 --> 00:16:15.448 of a mother goes into pregnancy

NOTE Confidence: 0.797860264778137

00:16:15.448 --> 00:16:17.284 with overweight and obesity.

NOTE Confidence: 0.797860264778137

00:16:17.290 --> 00:16:19.490 She is in a state where she has

NOTE Confidence: 0.797860264778137

00:16:19.490 --> 00:16:21.161 a higher level of inflammation

NOTE Confidence: 0.797860264778137

00:16:21.161 --> 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 --> 00:16:28.537 increasing like policies in VLDL Secretion,

NOTE Confidence: 0.797860264778137

00:16:28.540 --> 00:16:30.350 which leads to an increase

NOTE Confidence: 0.797860264778137

00:16:30.350 --> 00:16:31.436 in inflammatory markers,

NOTE Confidence: 0.797860264778137

00:16:31.440 --> 00:16:33.270 particular Interleukin one interleukin 6.

NOTE Confidence: 0.797860264778137

00:16:33.270 --> 00:16:34.437 Tina Falfa MCP.

NOTE Confidence: 0.797860264778137

00:16:34.437 --> 00:16:37.627 One what that does is then affects the

NOTE Confidence: 0.797860264778137

00:16:37.627 --> 00:16:40.739 fetus and the fetus is exposed to lipids.  
NOTE Confidence: 0.797860264778137

00:16:40.740 --> 00:16:42.705 It reprograms their metabolic gene  
NOTE Confidence: 0.797860264778137

00:16:42.705 --> 00:16:44.670 targets leading to fetal inflammation.  
NOTE Confidence: 0.797860264778137

00:16:44.670 --> 00:16:47.218 An increase in hepatic lipids also issues  
NOTE Confidence: 0.797860264778137

00:16:47.218 --> 00:16:49.779 in the skeletal muscle adipose tissue.  
NOTE Confidence: 0.797860264778137

00:16:49.780 --> 00:16:52.796 The brain in the pancreas and this leads  
NOTE Confidence: 0.797860264778137

00:16:52.796 --> 00:16:55.909 to childhood risk of disease so non  
NOTE Confidence: 0.797860264778137

00:16:55.909 --> 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 --> 00:17:07.025 This is one of my favorite studies  
NOTE Confidence: 0.797860264778137

00:17:07.025 --> 00:17:09.175 to show and demonstrate is the  
NOTE Confidence: 0.797860264778137

00:17:09.175 --> 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,

NOTE Confidence: 0.797860264778137

00:17:17.880 --> 00:17:20.400 children's born to moms before she

NOTE Confidence: 0.797860264778137

00:17:20.400 --> 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 --> 00:17:30.924 So BM S is before metabolic surgery.

NOTE Confidence: 0.797860264778137

00:17:30.930 --> 00:17:32.450 AMS after metabolic surgery.

NOTE Confidence: 0.797860264778137

00:17:32.450 --> 00:17:33.970 So we're comparing though.

NOTE Confidence: 0.797860264778137

00:17:33.970 --> 00:17:35.494 The child that was born before

NOTE Confidence: 0.797860264778137

00:17:35.494 --> 00:17:37.360 to the child that was born after,

NOTE Confidence: 0.797860264778137

00:17:37.360 --> 00:17:39.106 and so I want you to look at kind

NOTE Confidence: 0.797860264778137

00:17:39.106 --> 00:17:41.314 of a side by side profile of these

NOTE Confidence: 0.797860264778137

00:17:41.314 --> 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 --> 00:17:47.020 'cause That's a question that comes up.

NOTE Confidence: 0.797860264778137

00:17:47.020 --> 00:17:49.630 So I want to make sure I'm clear about that.

NOTE Confidence: 0.797860264778137

00:17:49.630 --> 00:17:51.322 What you can see here appearing

NOTE Confidence: 0.797860264778137

00:17:51.322 --> 00:17:52.450 those children that were

NOTE Confidence: 0.84949803352356

00:17:52.509 --> 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 --> 00:17:59.950 here that the wait was significantly less

NOTE Confidence: 0.84949803352356

00:17:59.993 --> 00:18:01.637 than those children born after surgery.

NOTE Confidence: 0.84949803352356

00:18:01.640 --> 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 --> 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 --> 00:18:10.910 but BMI percentile was lower.

NOTE Confidence: 0.84949803352356

00:18:10.910 --> 00:18:12.650 The weights, lower body fat,

NOTE Confidence: 0.84949803352356

00:18:12.650 --> 00:18:15.086 slower and some levels are lower glucose.

NOTE Confidence: 0.84949803352356

00:18:15.090 --> 00:18:18.126 Lowering that child boring after surgery.

NOTE Confidence: 0.84949803352356

00:18:18.130 --> 00:18:20.482 So what we can see here when we

NOTE Confidence: 0.84949803352356

00:18:20.482 --> 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 --> 00:18:27.342 there's a three fold decrease in

NOTE Confidence: 0.84949803352356

00:18:27.342 --> 00:18:29.088 the prevalence of severe obesity

NOTE Confidence: 0.84949803352356

00:18:29.088 --> 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 --> 00:18:33.153 and Activity improved lipid profile and

NOTE Confidence: 0.84949803352356

00:18:33.153 --> 00:18:35.379 an improvement in our inflammatory markers.

NOTE Confidence: 0.84949803352356

00:18:35.380 --> 00:18:37.324 So just with making that intervention

NOTE Confidence: 0.84949803352356

00:18:37.324 --> 00:18:39.520 in mom and often after surgery,

NOTE Confidence: 0.84949803352356

00:18:39.520 --> 00:18:40.900 mom still have obesity.

NOTE Confidence: 0.84949803352356

00:18:40.900 --> 00:18:42.280 But severity has improved,

NOTE Confidence: 0.84949803352356

00:18:42.280 --> 00:18:45.115 which means that likely the level of

NOTE Confidence: 0.84949803352356

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

NOTE Confidence: 0.84949803352356

00:18:47.515 --> 00:18:50.105 to an improved status for that child.  
NOTE Confidence: 0.84949803352356

00:18:50.110 --> 00:18:51.844 Now let's look at the guidelines  
NOTE Confidence: 0.84949803352356

00:18:51.844 --> 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 --> 00:18:56.520 the most commonly used guidelines,  
NOTE Confidence: 0.84949803352356

00:18:56.520 --> 00:18:58.648 or those from the American Heart Association,  
NOTE Confidence: 0.84949803352356

00:18:58.650 --> 00:18:59.870 American College of Cardiology.  
NOTE Confidence: 0.84949803352356

00:18:59.870 --> 00:19:01.090 In the obesity society,  
NOTE Confidence: 0.84949803352356

00:19:01.090 --> 00:19:02.615 this was a joint venture  
NOTE Confidence: 0.84949803352356

00:19:02.615 --> 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 --> 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 --> 00:19:10.180 We determined that weight category is assess  
NOTE Confidence: 0.84949803352356

00:19:10.180 --> 00:19:12.293 and treat cardiovascular disease risk factors

NOTE Confidence: 0.84949803352356

00:19:12.293 --> 00:19:14.363 and assess weight and lifestyle histories.

NOTE Confidence: 0.84949803352356

00:19:14.370 --> 00:19:15.875 Obviously these are things that

NOTE Confidence: 0.84949803352356

00:19:15.875 --> 00:19:17.079 we're all familiar with,

NOTE Confidence: 0.84949803352356

00:19:17.080 --> 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 --> 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 --> 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 --> 00:19:30.927 and I want to kind of push.

NOTE Confidence: 0.84949803352356

00:19:30.930 --> 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 --> 00:19:35.677 it's weird distributed.

NOTE Confidence: 0.84949803352356

00:19:35.677 --> 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 --> 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 --> 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 --> 00:19:54.100 their pants there,  
NOTE Confidence: 0.84949803352356

00:19:54.100 --> 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 --> 00:19:59.406 but they are wearing their pants  
NOTE Confidence: 0.84949803352356

00:19:59.406 --> 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 --> 00:20:04.802 We want to look at intensive management

NOTE Confidence: 0.84949803352356  
00:20:04.802 --> 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 --> 00:20:08.020 and diabetes.  
NOTE Confidence: 0.84949803352356  
00:20:08.020 --> 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 --> 00:20:12.658 that you do and Sleep Medicine.  
NOTE Confidence: 0.842742443084717  
00:20:16.170 --> 00:20:18.368 We want to assess weight and lifestyle  
NOTE Confidence: 0.842742443084717  
00:20:18.368 --> 00:20:20.349 history when I ask questions about  
NOTE Confidence: 0.842742443084717  
00:20:20.349 --> 00:20:22.631 the history of weight gain and loss  
NOTE Confidence: 0.842742443084717  
00:20:22.690 --> 00:20:24.972 overtime that really has to do with  
NOTE Confidence: 0.842742443084717  
00:20:24.972 --> 00:20:26.925 that weight cycling question that we  
NOTE Confidence: 0.842742443084717  
00:20:26.925 --> 00:20:28.875 talked about a little bit earlier.  
NOTE Confidence: 0.842742443084717  
00:20:28.880 --> 00:20:31.272 We want to look at details of previous  
NOTE Confidence: 0.842742443084717  
00:20:31.272 --> 00:20:33.120 weight loss attempts, dietary habits,  
NOTE Confidence: 0.842742443084717

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 --> 00:20:39.036 a family history of obesity is  
NOTE Confidence: 0.842742443084717

00:20:39.036 --> 00:20:40.672 extremely important and any other  
NOTE Confidence: 0.842742443084717

00:20:40.672 --> 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 --> 00:20:44.762 As we talked about.  
NOTE Confidence: 0.842742443084717

00:20:44.762 --> 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 --> 00:20:52.445 avoid weight gain and other risk factors  
NOTE Confidence: 0.842742443084717

00:20:52.445 --> 00:20:54.229 assess their readiness to make change  
NOTE Confidence: 0.842742443084717

00:20:54.229 --> 00:20:55.634 and identify barriers to success.  
NOTE Confidence: 0.842742443084717

00:20:55.640 --> 00:20:57.100 Each person will have their  
NOTE Confidence: 0.842742443084717

00:20:57.100 --> 00:20:58.268 own set of barriers.  
NOTE Confidence: 0.842742443084717

00:20:58.270 --> 00:20:59.929 We want to determine weight loss and

NOTE Confidence: 0.842742443084717  
00:20:59.929 --> 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 --> 00:21:05.569 give me like I want to be.  
NOTE Confidence: 0.842742443084717  
00:21:05.570 --> 00:21:05.855 Ex.  
NOTE Confidence: 0.842742443084717  
00:21:05.855 --> 00:21:06.710 Wait, I mean,  
NOTE Confidence: 0.842742443084717  
00:21:06.710 --> 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 --> 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 --> 00:21:20.814 to respond to whatever modality  
NOTE Confidence: 0.842742443084717  
00:21:20.814 --> 00:21:23.075 or therapy that I use and so we  
NOTE Confidence: 0.842742443084717  
00:21:23.075 --> 00:21:24.755 wanted to see what the body does.  
NOTE Confidence: 0.842742443084717  
00:21:24.760 --> 00:21:26.180 Always tell my patients their  
NOTE Confidence: 0.842742443084717

00:21:26.180 --> 00:21:28.190 body is the answer key and we  
NOTE Confidence: 0.842742443084717

00:21:28.190 --> 00:21:29.792 will use these different tools to  
NOTE Confidence: 0.842742443084717

00:21:29.792 --> 00:21:31.697 find out how their body responds.  
NOTE Confidence: 0.842742443084717

00:21:31.700 --> 00:21:33.428 We want to look at comprehensive  
NOTE Confidence: 0.842742443084717

00:21:33.428 --> 00:21:34.292 lifestyle therapies alone,  
NOTE Confidence: 0.842742443084717

00:21:34.300 --> 00:21:36.212 so we want to start there and in  
NOTE Confidence: 0.842742443084717

00:21:36.212 --> 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 --> 00:21:40.362 of the lecture.  
NOTE Confidence: 0.842742443084717

00:21:40.370 --> 00:21:42.538 For those of you that are coming in  
NOTE Confidence: 0.842742443084717

00:21:42.538 --> 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 --> 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 --> 00:21:50.758 but rather they have the disease of  
NOTE Confidence: 0.842742443084717

00:21:50.758 --> 00:21:53.607 obesity and there's a reason why I say that.

NOTE Confidence: 0.842742443084717

00:21:53.610 --> 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 --> 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 --> 00:22:03.565 So when patients experience weight

NOTE Confidence: 0.842742443084717

00:22:03.565 --> 00:22:05.600 stigma that leads to increased stress,

NOTE Confidence: 0.842742443084717

00:22:05.600 --> 00:22:07.535 that increased stress actually affects

NOTE Confidence: 0.842742443084717

00:22:07.535 --> 00:22:09.470 eating and physical activity behaviors

NOTE Confidence: 0.842742443084717

00:22:09.526 --> 00:22:11.590 where we see things such as binge eating,

NOTE Confidence: 0.842742443084717

00:22:11.590 --> 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 --> 00:22:15.684 disordered eating in a lower motivation

NOTE Confidence: 0.842742443084717

00:22:15.684 --> 00:22:18.170 for exercise and less physical activity.

NOTE Confidence: 0.842742443084717

00:22:18.170 --> 00:22:19.454 That stress actually leads

NOTE Confidence: 0.842742443084717

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

NOTE Confidence: 0.842742443084717

00:22:20.420 --> 00:22:22.988 and I think that's something that we're not.

NOTE Confidence: 0.842742443084717

00:22:22.990 --> 00:22:24.910 We're not maybe often clear about.

NOTE Confidence: 0.842742443084717

00:22:24.910 --> 00:22:26.375 So when people experience weight

NOTE Confidence: 0.842742443084717

00:22:26.375 --> 00:22:28.575 stigma that leads to stress at least

NOTE Confidence: 0.842742443084717

00:22:28.575 --> 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 --> 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 --> 00:22:40.350 when they experience weight stigma,

NOTE Confidence: 0.842742443084717

00:22:40.350 --> 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 --> 00:22:45.419 they avoid it.

NOTE Confidence: 0.842742443084717

00:22:45.419 --> 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

NOTE Confidence: 0.842742443084717  
00:22:48.495 --> 00:22:50.083 health screenings and poor  
NOTE Confidence: 0.842742443084717  
00:22:50.083 --> 00:22:51.501 communication between their physician  
NOTE Confidence: 0.842742443084717  
00:22:51.501 --> 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 --> 00:22:58.088 which then causes psychological  
NOTE Confidence: 0.83505642414093  
00:22:58.088 --> 00:22:59.174 health in distress,  
NOTE Confidence: 0.83505642414093  
00:22:59.180 --> 00:23:00.628 where we see depression,  
NOTE Confidence: 0.83505642414093  
00:23:00.628 --> 00:23:02.073 anxiety, low self esteem,  
NOTE Confidence: 0.83505642414093  
00:23:02.073 --> 00:23:04.020 poor body image, substance abuse,  
NOTE Confidence: 0.83505642414093  
00:23:04.020 --> 00:23:06.600 an A high level of suicidality.  
NOTE Confidence: 0.83505642414093  
00:23:06.600 --> 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 --> 00:23:11.980 less effective control of chronic  
NOTE Confidence: 0.83505642414093  
00:23:11.980 --> 00:23:14.050 disease with regards to self management,  
NOTE Confidence: 0.83505642414093  
00:23:14.050 --> 00:23:15.670 more advanced in poorly advance  
NOTE Confidence: 0.83505642414093

00:23:15.670 --> 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 --> 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 --> 00:23:28.310 does indeed lead to worse outcomes.  
NOTE Confidence: 0.83505642414093

00:23:28.310 --> 00:23:32.210 So I really want us to be mindful of that.  
NOTE Confidence: 0.83505642414093

00:23:32.210 --> 00:23:33.675 When we're looking at how  
NOTE Confidence: 0.83505642414093

00:23:33.675 --> 00:23:34.847 we select obesity treatment,  
NOTE Confidence: 0.83505642414093

00:23:34.850 --> 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 --> 00:23:43.054 it's important to note that many  
NOTE Confidence: 0.83505642414093

00:23:43.054 --> 00:23:44.809 people are getting away from this,  
NOTE Confidence: 0.83505642414093

00:23:44.810 --> 00:23:46.502 including Canada who just released their

NOTE Confidence: 0.83505642414093

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

NOTE Confidence: 0.83505642414093

00:23:48.620 --> 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 --> 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 --> 00:23:55.940 and things to reflect.

NOTE Confidence: 0.83505642414093

00:23:55.940 --> 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 --> 00:24:01.508 and behavioral therapy can be utilized,

NOTE Confidence: 0.83505642414093

00:24:01.510 --> 00:24:03.020 so that should be the.

NOTE Confidence: 0.83505642414093

00:24:03.020 --> 00:24:04.496 Cornerstone of our therapies.

NOTE Confidence: 0.83505642414093

00:24:04.496 --> 00:24:06.710 We can begin to introduce pharmacol

NOTE Confidence: 0.83505642414093

00:24:06.774 --> 00:24:08.279 therapy for the treatment of

NOTE Confidence: 0.83505642414093

00:24:08.279 --> 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,

NOTE Confidence: 0.83505642414093

00:24:12.120 --> 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 --> 00:24:16.020 and Type 2 diabetes.  
NOTE Confidence: 0.83505642414093

00:24:16.020 --> 00:24:17.970 And then we're looking at metabolic  
NOTE Confidence: 0.83505642414093

00:24:17.970 --> 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 --> 00:24:26.095 bariatric surgery with encourage  
NOTE Confidence: 0.83505642414093

00:24:26.095 --> 00:24:27.070 also mild obesity.  
NOTE Confidence: 0.83505642414093

00:24:27.070 --> 00:24:28.732 But the typical guidelines are the  
NOTE Confidence: 0.83505642414093

00:24:28.732 --> 00:24:30.631 test answer would be persons that  
NOTE Confidence: 0.83505642414093

00:24:30.631 --> 00:24:32.471 have moderate obesity with comorbid  
NOTE Confidence: 0.83505642414093

00:24:32.471 --> 00:24:33.930 conditions as previously noted.  
NOTE Confidence: 0.83505642414093

00:24:33.930 --> 00:24:35.958 And those that have severe obesity.  
NOTE Confidence: 0.83505642414093

00:24:35.960 --> 00:24:36.217 Now,

NOTE Confidence: 0.83505642414093

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

NOTE Confidence: 0.83505642414093

00:24:38.273 --> 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 --> 00:24:44.717 you that only 2% of patients that

NOTE Confidence: 0.83505642414093

00:24:44.717 --> 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 --> 00:24:49.072 pharmacotherapy for the treatment of

NOTE Confidence: 0.83505642414093

00:24:49.072 --> 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 --> 00:24:55.292 only 2% that means we are failing at

NOTE Confidence: 0.83505642414093

00:24:55.292 --> 00:24:57.665 least 98% of our patients with regards

NOTE Confidence: 0.83505642414093

00:24:57.665 --> 00:24:59.360 to metabolic and Barack surgery.

NOTE Confidence: 0.83505642414093

00:24:59.360 --> 00:25:01.677 Only 1% of patients that meet criteria

NOTE Confidence: 0.83505642414093

00:25:01.677 --> 00:25:03.760 for metabolic emerging surgery receive it,

NOTE Confidence: 0.83505642414093

00:25:03.760 --> 00:25:06.217 so the numbers are actually relatively low.

NOTE Confidence: 0.83505642414093

00:25:06.220 --> 00:25:08.330 A lot of that I think has to do with  
NOTE Confidence: 0.83505642414093

00:25:08.397 --> 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 --> 00:25:13.867 disease that it actually is.  
NOTE Confidence: 0.83505642414093

00:25:13.870 --> 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 --> 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 --> 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 --> 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 --> 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

NOTE Confidence: 0.83505642414093

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 --> 00:25:38.108 the answer depressants.

NOTE Confidence: 0.83505642414093

00:25:38.108 --> 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 --> 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 --> 00:25:52.484 if you're looking at beta blockers,

NOTE Confidence: 0.806577265262604

00:25:52.490 --> 00:25:54.986 car vadal all by far is the most

NOTE Confidence: 0.806577265262604

00:25:54.986 --> 00:25:57.068 weight neutral of the beta blockers.

NOTE Confidence: 0.806577265262604

00:25:57.070 --> 00:25:58.705 All of the beta blockers

NOTE Confidence: 0.806577265262604

00:25:58.705 --> 00:26:00.340 will lead to weight change,  
NOTE Confidence: 0.806577265262604

00:26:00.340 --> 00:26:02.629 but Corvetto law is the least likely.  
NOTE Confidence: 0.806577265262604

00:26:02.630 --> 00:26:04.260 For example in that category.  
NOTE Confidence: 0.806577265262604

00:26:04.260 --> 00:26:05.890 So our strategy of treatment  
NOTE Confidence: 0.806577265262604

00:26:05.890 --> 00:26:07.194 for looking at weight,  
NOTE Confidence: 0.806577265262604

00:26:07.200 --> 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 --> 00:26:13.109 source of weight gain and patient.  
NOTE Confidence: 0.806577265262604

00:26:13.110 --> 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 --> 00:26:18.388 when it discontinued that agent,  
NOTE Confidence: 0.806577265262604

00:26:18.390 --> 00:26:20.270 and if we can't consider  
NOTE Confidence: 0.806577265262604

00:26:20.270 --> 00:26:21.774 or discontinue that agents,  
NOTE Confidence: 0.806577265262604

00:26:21.780 --> 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 --> 00:26:28.103 for weight loss in conjunction with

NOTE Confidence: 0.806577265262604

00:26:28.103 --> 00:26:29.700 appropriate lifestyle therapies.

NOTE Confidence: 0.806577265262604

00:26:29.700 --> 00:26:32.339 So now let's look at these anti

NOTE Confidence: 0.806577265262604

00:26:32.339 --> 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 --> 00:26:40.624 in obesity medicine.

NOTE Confidence: 0.806577265262604

00:26:40.630 --> 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 --> 00:26:46.754 For those of you who aren't

NOTE Confidence: 0.806577265262604

00:26:46.754 --> 00:26:48.320 already untrained in obesity,

NOTE Confidence: 0.806577265262604

00:26:48.320 --> 00:26:50.636 these would be maybe knew or

NOTE Confidence: 0.806577265262604

00:26:50.636 --> 00:26:52.180 kind of new information.

NOTE Confidence: 0.806577265262604

00:26:52.180 --> 00:26:54.105 Most agents can be characterized

NOTE Confidence: 0.806577265262604

00:26:54.105 --> 00:26:55.645 into three primary groups,

NOTE Confidence: 0.806577265262604

00:26:55.650 --> 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 --> 00:27:02.595 to impair dietary reabsorption,  
NOTE Confidence: 0.806577265262604

00:27:02.600 --> 00:27:04.540 and then those that may  
NOTE Confidence: 0.806577265262604

00:27:04.540 --> 00:27:05.704 increase energy expenditure.  
NOTE Confidence: 0.806577265262604

00:27:05.710 --> 00:27:07.929 There is one that has been removed.  
NOTE Confidence: 0.806577265262604

00:27:07.930 --> 00:27:10.149 I'll talk about that in a second,  
NOTE Confidence: 0.806577265262604

00:27:10.150 --> 00:27:12.046 but these were the FDA approved  
NOTE Confidence: 0.806577265262604

00:27:12.046 --> 00:27:12.994 medications currently available.  
NOTE Confidence: 0.806577265262604

00:27:13.000 --> 00:27:15.504 The ones that have stars by them that  
NOTE Confidence: 0.806577265262604

00:27:15.504 --> 00:27:17.697 you'll know those are approved by the  
NOTE Confidence: 0.806577265262604

00:27:17.697 --> 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 --> 00:27:22.186 disease of obesity.  
NOTE Confidence: 0.806577265262604

00:27:22.190 --> 00:27:24.582 So those ones that have stars by them

NOTE Confidence: 0.806577265262604

00:27:24.582 --> 00:27:26.946 were proved starting in 2012 and beyond.

NOTE Confidence: 0.806577265262604

00:27:26.950 --> 00:27:28.218 Anything that predates that,

NOTE Confidence: 0.806577265262604

00:27:28.218 --> 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 --> 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 --> 00:27:35.880 of obesity in the US back in 1959.

NOTE Confidence: 0.806577265262604

00:27:35.880 --> 00:27:38.868 None of those are approved for long term use.

NOTE Confidence: 0.806577265262604

00:27:38.870 --> 00:27:39.584 Interestingly enough,

NOTE Confidence: 0.806577265262604

00:27:39.584 --> 00:27:42.083 you can see that phentramin into pure

NOTE Confidence: 0.806577265262604

00:27:42.083 --> 00:27:44.505 mating combos approved a long term suit you,

NOTE Confidence: 0.806577265262604

00:27:44.510 --> 00:27:46.582 so maybe the FDA should reconsider how

NOTE Confidence: 0.806577265262604

00:27:46.582 --> 00:27:48.499 they think about these medications.

NOTE Confidence: 0.806577265262604

00:27:48.500 --> 00:27:50.943 One drive has been withdrawn with them

NOTE Confidence: 0.806577265262604

00:27:50.943 --> 00:27:53.477 from the market as early as this year,

NOTE Confidence: 0.806577265262604

00:27:53.480 --> 00:27:55.466 or at least later this year.  
NOTE Confidence: 0.806577265262604

00:27:55.470 --> 00:27:56.925 I'm sorry and that forecast  
NOTE Confidence: 0.806577265262604

00:27:56.925 --> 00:27:59.574 and it was a 5 HT 2C inhibitor  
NOTE Confidence: 0.806577265262604

00:27:59.574 --> 00:28:01.439 for those that were around.  
NOTE Confidence: 0.806577265262604

00:28:01.440 --> 00:28:03.407 And remember the Finn Finn era there  
NOTE Confidence: 0.806577265262604

00:28:03.407 --> 00:28:05.486 was finter mean which was combined  
NOTE Confidence: 0.806577265262604

00:28:05.486 --> 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 --> 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 --> 00:28:16.257 because that combination of  
NOTE Confidence: 0.806577265262604

00:28:16.257 --> 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 --> 00:28:21.886 but not the degree comment  
NOTE Confidence: 0.806577265262604

00:28:21.886 --> 00:28:23.670 combo in terms of Health,  
NOTE Confidence: 0.806577265262604

00:28:23.670 --> 00:28:25.914 it caused heart valvulopathy this was

NOTE Confidence: 0.806577265262604

00:28:25.914 --> 00:28:28.056 withdrawn for the presumption that this

NOTE Confidence: 0.806577265262604

00:28:28.056 --> 00:28:30.100 may cause an increase in cancer risk.

NOTE Confidence: 0.806577265262604

00:28:30.100 --> 00:28:31.906 When you looked at the studies

NOTE Confidence: 0.806577265262604

00:28:31.906 --> 00:28:33.110 when they were looking

NOTE Confidence: 0.841190814971924

00:28:33.167 --> 00:28:35.547 at Post hoc analysis of those individuals

NOTE Confidence: 0.841190814971924

00:28:35.547 --> 00:28:37.539 that had undergone clinical trials.

NOTE Confidence: 0.841190814971924

00:28:37.540 --> 00:28:40.039 The persons that were on location 7.6%

NOTE Confidence: 0.841190814971924

00:28:40.040 --> 00:28:42.539 of them developed some type of cancer,

NOTE Confidence: 0.841190814971924

00:28:42.540 --> 00:28:43.968 whereas those that were

NOTE Confidence: 0.841190814971924

00:28:43.968 --> 00:28:46.110 not on low cancer 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 --> 00:28:50.955 as to whether or not it was

NOTE Confidence: 0.841190814971924

00:28:50.955 --> 00:28:52.176 really statistically significant,

NOTE Confidence: 0.841190814971924

00:28:52.180 --> 00:28:55.036 but I think because of caution FDA did

NOTE Confidence: 0.841190814971924

00:28:55.036 --> 00:28:57.886 ask them to move that from the list.

NOTE Confidence: 0.841190814971924

00:28:57.890 --> 00:29:00.382 You can see we have CNS stimulants  
NOTE Confidence: 0.841190814971924

00:29:00.382 --> 00:29:01.094 and Anorexia.  
NOTE Confidence: 0.841190814971924

00:29:01.100 --> 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 --> 00:29:05.036 along with opioid antagonists.  
NOTE Confidence: 0.841190814971924

00:29:05.036 --> 00:29:06.831 And then finally our GI  
NOTE Confidence: 0.841190814971924

00:29:06.831 --> 00:29:08.259 agents such as Orlistat.  
NOTE Confidence: 0.841190814971924

00:29:08.260 --> 00:29:10.240 And our GIP one agonists like  
NOTE Confidence: 0.841190814971924

00:29:10.240 --> 00:29:11.560 Liraglutide. It 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 --> 00:29:14.918 for the treatment of obesity.  
NOTE Confidence: 0.841190814971924

00:29:14.920 --> 00:29:16.660 Other agents that docs may use  
NOTE Confidence: 0.841190814971924

00:29:16.660 --> 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 --> 00:29:22.579 with certain drugs such as tapir,  
NOTE Confidence: 0.841190814971924

00:29:22.580 --> 00:29:24.911 making soon as my both for Witcher

NOTE Confidence: 0.841190814971924  
00:29:24.911 --> 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 --> 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 --> 00:29:32.900 and or for smoking cessation.  
NOTE Confidence: 0.841190814971924  
00:29:32.900 --> 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 --> 00:29:38.090 which of course are utilized for  
NOTE Confidence: 0.841190814971924  
00:29:38.090 --> 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 --> 00:29:42.957 and bariatric surgery.  
NOTE Confidence: 0.841190814971924  
00:29:42.960 --> 00:29:45.214 Just a reminder, won't belabor this point.  
NOTE Confidence: 0.841190814971924  
00:29:45.220 --> 00:29:47.467 BMI greater than or equal to 40,  
NOTE Confidence: 0.841190814971924  
00:29:47.470 --> 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,  
NOTE Confidence: 0.841190814971924

00:29:51.010 --> 00:29:52.948 9.9 with a serious comorbid condition,  
NOTE Confidence: 0.841190814971924

00:29:52.950 --> 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 --> 00:29:58.743 three prior unsuccessful  
NOTE Confidence: 0.841190814971924

00:29:58.743 --> 00:29:59.706 weight loss attempts.  
NOTE Confidence: 0.841190814971924

00:29:59.710 --> 00:30:01.480 So we don't just send people  
NOTE Confidence: 0.841190814971924

00:30:01.480 --> 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 --> 00:30:08.598 but if they are continuing to have  
NOTE Confidence: 0.841190814971924

00:30:08.598 --> 00:30:10.979 resistance in terms of their body responding.  
NOTE Confidence: 0.841190814971924

00:30:10.980 --> 00:30:13.311 We do want to use the appropriate  
NOTE Confidence: 0.841190814971924

00:30:13.311 --> 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 --> 00:30:19.940 anywhere in the world currently  
NOTE Confidence: 0.841190814971924

00:30:19.940 --> 00:30:21.732 is metabolic in Berwick surgery.

NOTE Confidence: 0.841190814971924

00:30:21.732 --> 00:30:23.412 You can see acceptable operative

NOTE Confidence: 0.841190814971924

00:30:23.412 --> 00:30:24.420 risk is important,

NOTE Confidence: 0.841190814971924

00:30:24.420 --> 00:30:26.135 the ability to producing treatment

NOTE Confidence: 0.841190814971924

00:30:26.135 --> 00:30:28.222 and long-term following an ability to

NOTE Confidence: 0.841190814971924

00:30:28.222 --> 00:30:29.797 understand that this their success,

NOTE Confidence: 0.841190814971924

00:30:29.800 --> 00:30:31.364 significant lifestyle changes that

NOTE Confidence: 0.841190814971924

00:30:31.364 --> 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 --> 00:30:37.220 also when you're working with patients.

NOTE Confidence: 0.841190814971924

00:30:37.220 --> 00:30:38.954 The most common procedures that are

NOTE Confidence: 0.841190814971924

00:30:38.954 --> 00:30:40.997 performed here in the USI do want to

NOTE Confidence: 0.841190814971924

00:30:40.997 --> 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 --> 00:30:45.320 is the Sleekest recta me almost

NOTE Confidence: 0.841190814971924

00:30:45.320 --> 00:30:47.240 70% of all cases performed in the

NOTE Confidence: 0.841190814971924

00:30:47.240 --> 00:30:48.914 United States now are the sleep  
NOTE Confidence: 0.841190814971924

00:30:48.914 --> 00:30:50.720 distract me and you can see here.  
NOTE Confidence: 0.841190814971924

00:30:50.720 --> 00:30:52.340 I'm a large portion of the  
NOTE Confidence: 0.841190814971924

00:30:52.340 --> 00:30:53.150 stomach is removed.  
NOTE Confidence: 0.841190814971924

00:30:53.150 --> 00:30:54.854 A lot of people call these both restrictive  
NOTE Confidence: 0.841190814971924

00:30:54.854 --> 00:30:56.390 and or malabsorptive procedures,  
NOTE Confidence: 0.841190814971924

00:30:56.390 --> 00:30:58.010 and that is not the primary  
NOTE Confidence: 0.841190814971924

00:30:58.010 --> 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 --> 00:31:04.130 which we know is housed here  
NOTE Confidence: 0.841190814971924

00:31:04.130 --> 00:31:05.889 in the fundus of the stomach.  
NOTE Confidence: 0.841190814971924

00:31:05.890 --> 00:31:07.415 Removing this portion of the  
NOTE Confidence: 0.841190814971924

00:31:07.415 --> 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 --> 00:31:11.875 especially in that immediate postoperative

NOTE Confidence: 0.841190814971924

00:31:11.875 --> 00:31:13.580 course and the postoperative course

NOTE Confidence: 0.841190814971924

00:31:13.626 --> 00:31:15.066 that lasted till about 12 months.

NOTE Confidence: 0.803509831428528

00:31:15.070 --> 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 --> 00:31:19.965 for example, grilling in the

NOTE Confidence: 0.803509831428528

00:31:19.965 --> 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 --> 00:31:25.350 It's important for us to know

NOTE Confidence: 0.803509831428528

00:31:25.350 --> 00:31:26.844 which procedures being done because

NOTE Confidence: 0.803509831428528

00:31:26.844 --> 00:31:28.319 the side effect profile does

NOTE Confidence: 0.803509831428528

00:31:28.319 --> 00:31:30.060 vary for the different surgeries,

NOTE Confidence: 0.803509831428528

00:31:30.060 --> 00:31:32.013 so make sure when you're either referring

NOTE Confidence: 0.803509831428528

00:31:32.013 --> 00:31:34.039 out or are getting referrals in.

NOTE Confidence: 0.803509831428528

00:31:34.040 --> 00:31:36.238 That's been correctly noted in the chart.

NOTE Confidence: 0.803509831428528

00:31:36.240 --> 00:31:37.119 I'm the room.

NOTE Confidence: 0.803509831428528

00:31:37.119 --> 00:31:39.955 I gastric bypass is still by far the most  
NOTE Confidence: 0.803509831428528

00:31:39.955 --> 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 --> 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 --> 00:31:48.632 For example,  
NOTE Confidence: 0.803509831428528

00:31:48.632 --> 00:31:50.262 if you need something that's  
NOTE Confidence: 0.803509831428528

00:31:50.262 --> 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 --> 00:31:56.424 you can see that you bypass a large  
NOTE Confidence: 0.803509831428528

00:31:56.424 --> 00:31:59.213 portion of the stomach an the proximal  
NOTE Confidence: 0.803509831428528

00:31:59.213 --> 00:32:01.283 portion of the small intestine.  
NOTE Confidence: 0.803509831428528

00:32:01.290 --> 00:32:03.290 So I'm going to go into a few  
NOTE Confidence: 0.803509831428528

00:32:03.290 --> 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,

NOTE Confidence: 0.803509831428528

00:32:07.110 --> 00:32:08.839 because a lot of this is kind

NOTE Confidence: 0.803509831428528

00:32:08.839 --> 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 --> 00:32:14.588 we see how it works in real life.

NOTE Confidence: 0.803509831428528

00:32:14.590 --> 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 --> 00:32:21.213 questions so we have a 54 year old

NOTE Confidence: 0.803509831428528

00:32:21.213 --> 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 --> 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 --> 00:32:28.905 She tells me she's retained 20 pounds

NOTE Confidence: 0.803509831428528

00:32:28.905 --> 00:32:30.930 with each of virtue president pregnancies.

NOTE Confidence: 0.803509831428528

00:32:30.930 --> 00:32:32.550 So like 40 pounds up from

NOTE Confidence: 0.803509831428528

00:32:32.550 --> 00:32:33.980 what her baseline was free.  
NOTE Confidence: 0.803509831428528

00:32:33.980 --> 00:32:34.544 Having children,  
NOTE Confidence: 0.803509831428528

00:32:34.544 --> 00:32:35.672 she's tried many commercial  
NOTE Confidence: 0.803509831428528

00:32:35.672 --> 00:32:37.279 programs which led to 20 pounds.  
NOTE Confidence: 0.803509831428528

00:32:37.280 --> 00:32:39.198 That seems to be the magic number  
NOTE Confidence: 0.803509831428528

00:32:39.198 --> 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 --> 00:32:45.744 but that Finn Finn back in the 90s  
NOTE Confidence: 0.803509831428528

00:32:45.744 --> 00:32:47.770 I lost £50 over the course of six  
NOTE Confidence: 0.803509831428528

00:32:47.770 --> 00:32:49.820 months and so she comes into me  
NOTE Confidence: 0.803509831428528

00:32:49.820 --> 00:32:51.470 interested in weight loss medications  
NOTE Confidence: 0.803509831428528

00:32:51.470 --> 00:32:52.712 and in behavioral therapies.  
NOTE Confidence: 0.803509831428528

00:32:52.712 --> 00:32:55.040 So I'm going to show you her graph  
NOTE Confidence: 0.803509831428528

00:32:55.096 --> 00:32:56.800 and I wanted to just take a little  
NOTE Confidence: 0.803509831428528

00:32:56.800 --> 00:32:58.553 bit of time explaining what you're

NOTE Confidence: 0.803509831428528  
00:32:58.553 --> 00:32:59.825 seeing on the screen.  
NOTE Confidence: 0.803509831428528  
00:32:59.830 --> 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 --> 00:33:05.322 stands for body mass index.  
NOTE Confidence: 0.803509831428528  
00:33:05.330 --> 00:33:06.800 Of course on this axis.  
NOTE Confidence: 0.803509831428528  
00:33:06.800 --> 00:33:08.150 And then we have time.  
NOTE Confidence: 0.803509831428528  
00:33:08.150 --> 00:33:10.562 So you get a sense of what's going on.  
NOTE Confidence: 0.803509831428528  
00:33:10.570 --> 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 --> 00:33:15.869 me she keeps losing and gaining that  
NOTE Confidence: 0.803509831428528  
00:33:15.869 --> 00:33:17.825 actually happens and it happens overtime.  
NOTE Confidence: 0.803509831428528  
00:33:17.830 --> 00:33:20.520 But she comes into me with a BMI of 40,  
NOTE Confidence: 0.803509831428528  
00:33:20.520 --> 00:33:21.860 so she's definitely coming into  
NOTE Confidence: 0.803509831428528  
00:33:21.860 --> 00:33:22.932 me with severe obesity.  
NOTE Confidence: 0.803509831428528  
00:33:22.940 --> 00:33:24.404 You could maybe recall what she  
NOTE Confidence: 0.803509831428528

00:33:24.404 --> 00:33:26.169 told me she was interested in,  
NOTE Confidence: 0.803509831428528

00:33:26.170 --> 00:33:28.314 and notice she did have a pretty lovely  
NOTE Confidence: 0.803509831428528

00:33:28.314 --> 00:33:30.466 response. She comes down to BMI of 31.  
NOTE Confidence: 0.803509831428528

00:33:30.470 --> 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 --> 00:33:35.848 will respond with a resounding she  
NOTE Confidence: 0.803509831428528

00:33:35.848 --> 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 --> 00:33:40.271 That makes sense,  
NOTE Confidence: 0.828991651535034

00:33:40.271 --> 00:33:42.053 but that was not what happened.  
NOTE Confidence: 0.828991651535034

00:33:42.060 --> 00:33:44.188 She participate in our twelve week program  
NOTE Confidence: 0.828991651535034

00:33:44.188 --> 00:33:45.940 here called healthy habits for life.  
NOTE Confidence: 0.828991651535034

00:33:45.940 --> 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 --> 00:33:52.783 response to behavioral modification,

NOTE Confidence: 0.828991651535034  
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 --> 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 --> 00:34:02.828 We teach things such as volume  
NOTE Confidence: 0.828991651535034  
00:34:02.828 --> 00:34:04.327 metrics like what foods are  
NOTE Confidence: 0.828991651535034  
00:34:04.327 --> 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 --> 00:34:09.920 such as calories, and so this did.  
NOTE Confidence: 0.828991651535034  
00:34:09.920 --> 00:34:11.220 Make a huge difference for  
NOTE Confidence: 0.828991651535034  
00:34:11.220 --> 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 --> 00:34:17.380 which is exactly what we do.  
NOTE Confidence: 0.828991651535034

00:34:17.380 --> 00:34:18.885 Many patients will reach their  
NOTE Confidence: 0.828991651535034

00:34:18.885 --> 00:34:20.089 nadir with either behavior,  
NOTE Confidence: 0.828991651535034

00:34:20.090 --> 00:34:21.095 medication or surgery,  
NOTE Confidence: 0.828991651535034

00:34:21.095 --> 00:34:23.756 and then they'll begin to rebound back as  
NOTE Confidence: 0.828991651535034

00:34:23.756 --> 00:34:25.804 the body tries to defend its set point.  
NOTE Confidence: 0.828991651535034

00:34:25.810 --> 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 --> 00:34:33.204 which I told you is the drug  
NOTE Confidence: 0.828991651535034

00:34:33.204 --> 00:34:34.840 that's been around the longest.  
NOTE Confidence: 0.828991651535034

00:34:34.840 --> 00:34:36.658 Notice how she comes down here  
NOTE Confidence: 0.828991651535034

00:34:36.658 --> 00:34:38.450 and then rebounds just a smidge,  
NOTE Confidence: 0.828991651535034

00:34:38.450 --> 00:34:40.586 but stabilizes and BMI of about 28.5 and  
NOTE Confidence: 0.828991651535034

00:34:40.586 --> 00:34:42.670 then notice using another downward trend.  
NOTE Confidence: 0.828991651535034

00:34:42.670 --> 00:34:45.166 That was when I added her second agent.  
NOTE Confidence: 0.828991651535034

00:34:45.170 --> 00:34:47.348 Show pyramid so mimicking the phentramin

NOTE Confidence: 0.828991651535034  
00:34:47.348 --> 00:34:48.800 topiramate improved under combination  
NOTE Confidence: 0.828991651535034  
00:34:48.848 --> 00:34:50.132 under the trade name of Kissimmee  
NOTE Confidence: 0.828991651535034  
00:34:50.132 --> 00:34:52.053 am I like to use these dictionaries  
NOTE Confidence: 0.828991651535034  
00:34:52.053 --> 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 --> 00:34:57.978 number of medications that I can.  
NOTE Confidence: 0.828991651535034  
00:34:57.980 --> 00:34:59.402 I do recognize that these patients  
NOTE Confidence: 0.828991651535034  
00:34:59.402 --> 00:35:00.758 will need to be maintained  
NOTE Confidence: 0.828991651535034  
00:35:00.758 --> 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 --> 00:35:06.357 and so the least number of drugs  
NOTE Confidence: 0.828991651535034  
00:35:06.357 --> 00:35:08.350 I can use is always great.  
NOTE Confidence: 0.828991651535034  
00:35:08.350 --> 00:35:10.513 And if I start medications in combination  
NOTE Confidence: 0.828991651535034  
00:35:10.513 --> 00:35:12.604 also I'm not able to control for  
NOTE Confidence: 0.828991651535034  
00:35:12.604 --> 00:35:15.060 what caused what in terms of side effects.  
NOTE Confidence: 0.828991651535034

00:35:15.060 --> 00:35:17.420 So let's say I put her on the  
NOTE Confidence: 0.828991651535034

00:35:17.420 --> 00:35:18.819 combination at the outset.  
NOTE Confidence: 0.828991651535034

00:35:18.820 --> 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 --> 00:35:26.648 but I might eliminate using two  
NOTE Confidence: 0.828991651535034

00:35:26.648 --> 00:35:28.200 potential drugs that could be used.  
NOTE Confidence: 0.828991651535034

00:35:28.200 --> 00:35:30.342 Keeping in mind that we don't  
NOTE Confidence: 0.828991651535034

00:35:30.342 --> 00:35:31.770 have alot available currently.  
NOTE Confidence: 0.828991651535034

00:35:31.770 --> 00:35:34.074 This is one of my favorite case actually  
NOTE Confidence: 0.828991651535034

00:35:34.074 --> 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 --> 00:35:40.310 She was on the vineyard when  
NOTE Confidence: 0.828991651535034

00:35:40.310 --> 00:35:41.530 we did our appointment,  
NOTE Confidence: 0.828991651535034

00:35:41.530 --> 00:35:43.744 so there's a 57 year old woman who's the

NOTE Confidence: 0.828991651535034  
00:35:43.744 --> 00:35:45.800 past medical history of dyslipidemia,  
NOTE Confidence: 0.828991651535034  
00:35:45.800 --> 00:35:46.452 breast cancer,  
NOTE Confidence: 0.828991651535034  
00:35:46.452 --> 00:35:46.778 hypertension,  
NOTE Confidence: 0.828991651535034  
00:35:46.778 --> 00:35:48.408 depression and pernicious anemia give  
NOTE Confidence: 0.828991651535034  
00:35:48.408 --> 00:35:50.200 you a little bit more information  
NOTE Confidence: 0.828991651535034  
00:35:50.200 --> 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 --> 00:35:54.634 rice in the morning cashews and  
NOTE Confidence: 0.828991651535034  
00:35:54.634 --> 00:35:56.488 goat cheese for lunch she's doing  
NOTE Confidence: 0.828991651535034  
00:35:56.488 --> 00:35:57.999 fish sandwich with vegetables.  
NOTE Confidence: 0.828991651535034  
00:35:58.000 --> 00:35:59.830 She may do some cheese and  
NOTE Confidence: 0.828991651535034  
00:35:59.830 --> 00:36:01.050 crackers or some cashews,  
NOTE Confidence: 0.828991651535034  
00:36:01.050 --> 00:36:02.778 and for dinner she's doing more  
NOTE Confidence: 0.828991651535034  
00:36:02.778 --> 00:36:04.671 like a spinach salad with some  
NOTE Confidence: 0.828991651535034  
00:36:04.671 --> 00:36:06.035 lovely vegetables added in.  
NOTE Confidence: 0.828991651535034

00:36:06.040 --> 00:36:06.889 She's pretty active.  
NOTE Confidence: 0.828991651535034

00:36:06.889 --> 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 --> 00:36:11.634 two videos a week for 1/2  
NOTE Confidence: 0.845041573047638

00:36:11.634 --> 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 --> 00:36:20.578 going on with the sleep and for her  
NOTE Confidence: 0.845041573047638

00:36:20.633 --> 00:36:22.418 she was doing a pretty good job.  
NOTE Confidence: 0.845041573047638

00:36:22.420 --> 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 --> 00:36:28.102 so weight in pounds again to remind  
NOTE Confidence: 0.845041573047638

00:36:28.102 --> 00:36:30.294 you on this axis, BMI or body mass  
NOTE Confidence: 0.845041573047638

00:36:30.294 --> 00:36:32.519 index on this axis and then time here,  
NOTE Confidence: 0.845041573047638

00:36:32.520 --> 00:36:34.671 but I want you to see is that this

NOTE Confidence: 0.845041573047638  
00:36:34.671 --> 00:36:36.340 patient had very severe obesity.  
NOTE Confidence: 0.845041573047638  
00:36:36.340 --> 00:36:38.900 BMI is greater than 50 or above, very severe.  
NOTE Confidence: 0.845041573047638  
00:36:38.900 --> 00:36:40.200 Sometimes you'll hear this.  
NOTE Confidence: 0.845041573047638  
00:36:40.200 --> 00:36:41.500 To a super obesity,  
NOTE Confidence: 0.845041573047638  
00:36:41.500 --> 00:36:43.125 she comes down quite nicely.  
NOTE Confidence: 0.845041573047638  
00:36:43.130 --> 00:36:46.380 I think we can agree to a BMI of 33,  
NOTE Confidence: 0.845041573047638  
00:36:46.380 --> 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 --> 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 --> 00:37:01.814 so the likelihood this is surgery from  
NOTE Confidence: 0.845041573047638  
00:37:01.814 --> 00:37:03.865 an obesity medicine position is probably  
NOTE Confidence: 0.845041573047638  
00:37:03.865 --> 00:37:06.189 low and you probably right with that.  
NOTE Confidence: 0.845041573047638

00:37:06.190 --> 00:37:07.530 So this was phentramin,  
NOTE Confidence: 0.845041573047638

00:37:07.530 --> 00:37:08.870 a tapir mating combination.  
NOTE Confidence: 0.845041573047638

00:37:08.870 --> 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 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 --> 00:37:16.424 I want you to notice is  
NOTE Confidence: 0.845041573047638

00:37:16.424 --> 00:37:17.940 that she began to regain.  
NOTE Confidence: 0.845041573047638

00:37:17.940 --> 00:37:21.500 And so she comes back up to this BMI of 40,  
NOTE Confidence: 0.845041573047638

00:37:21.500 --> 00:37:22.472 which is severe,  
NOTE Confidence: 0.845041573047638

00:37:22.472 --> 00:37:24.416 but nowhere near where she started.  
NOTE Confidence: 0.845041573047638

00:37:24.420 --> 00:37:26.485 But notice we were very sharp increase  
NOTE Confidence: 0.845041573047638

00:37:26.485 --> 00:37:28.629 and you might wonder what happened.  
NOTE Confidence: 0.845041573047638

00:37:28.630 --> 00:37:30.574 So at that time her physician  
NOTE Confidence: 0.845041573047638

00:37:30.574 --> 00:37:31.870 stopped her medications because,  
NOTE Confidence: 0.845041573047638

00:37:31.870 --> 00:37:32.193 oh,  
NOTE Confidence: 0.845041573047638

00:37:32.193 --> 00:37:33.808 you don't keep these medications

NOTE Confidence: 0.845041573047638  
00:37:33.808 --> 00:37:34.454 on long-term,  
NOTE Confidence: 0.845041573047638  
00:37:34.460 --> 00:37:36.196 or that was the mantra at the  
NOTE Confidence: 0.845041573047638  
00:37:36.196 --> 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 --> 00:37:42.642 a curd, and we were able to bring  
NOTE Confidence: 0.845041573047638  
00:37:42.642 --> 00:37:44.826 her back down to BMI of 33.  
NOTE Confidence: 0.845041573047638  
00:37:44.830 --> 00:37:47.098 But this time she underwent a bypass.  
NOTE Confidence: 0.845041573047638  
00:37:47.100 --> 00:37:49.137 I think that we can all agree  
NOTE Confidence: 0.845041573047638  
00:37:49.137 --> 00:37:51.369 here that her response to bypass.  
NOTE Confidence: 0.845041573047638  
00:37:51.370 --> 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 --> 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 --> 00:37:58.330 actually for she was much to  
NOTE Confidence: 0.845041573047638  
00:37:58.330 --> 00:38:00.220 have much more to lose here.  
NOTE Confidence: 0.845041573047638

00:38:00.220 --> 00:38:00.830 Be up,  
NOTE Confidence: 0.845041573047638

00:38:00.830 --> 00:38:03.270 but like that's not the response to bypass.  
NOTE Confidence: 0.845041573047638

00:38:03.270 --> 00:38:05.100 Not really that great, you know.  
NOTE Confidence: 0.845041573047638

00:38:05.100 --> 00:38:07.652 Maybe we would expect you to bring more  
NOTE Confidence: 0.845041573047638

00:38:07.652 --> 00:38:10.590 to the line now she comes in to see me.  
NOTE Confidence: 0.845041573047638

00:38:10.590 --> 00:38:12.697 Of course, here when she's begun to  
NOTE Confidence: 0.845041573047638

00:38:12.697 --> 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 Sorry guys.  
NOTE Confidence: 0.845041573047638

00:38:15.934 --> 00:38:16.292 Anne,  
NOTE Confidence: 0.845041573047638

00:38:16.292 --> 00:38:18.440 she comes here with the BMI  
NOTE Confidence: 0.845041573047638

00:38:18.513 --> 00:38:20.338 44.5 comes down nicely here.  
NOTE Confidence: 0.845041573047638

00:38:20.340 --> 00:38:22.552 Notice this is a much lower point  
NOTE Confidence: 0.845041573047638

00:38:22.552 --> 00:38:24.653 than she initially got back in 2004  
NOTE Confidence: 0.845041573047638

00:38:24.653 --> 00:38:26.660 or even after her surgery in 2006,  
NOTE Confidence: 0.845041573047638

00:38:26.660 --> 00:38:28.690 and so the question I would ask

NOTE Confidence: 0.845041573047638

00:38:28.690 --> 00:38:30.942 you is what did I do for this

NOTE Confidence: 0.845041573047638

00:38:30.942 --> 00:38:33.015 lovely lady who is on the vineyard

NOTE Confidence: 0.845041573047638

00:38:33.015 --> 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 --> 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 --> 00:38:43.219 that she didn't need the room.

NOTE Confidence: 0.845041573047638

00:38:43.220 --> 00:38:45.074 Why that that was not a

NOTE Confidence: 0.845041573047638

00:38:45.074 --> 00:38:46.310 necessary procedure for her

NOTE Confidence: 0.831529855728149

00:38:46.374 --> 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 --> 00:38:51.730 even in children.

NOTE Confidence: 0.831529855728149

00:38:51.730 --> 00:38:53.710 Which I do send to surgery,

NOTE Confidence: 0.831529855728149

00:38:53.710 --> 00:38:55.852 but for this particular patient we've

NOTE Confidence: 0.831529855728149

00:38:55.852 --> 00:38:58.380 already proven that she had done well

NOTE Confidence: 0.831529855728149

00:38:58.380 --> 00:39:00.105 with pharmacotherapy and she needed  
NOTE Confidence: 0.831529855728149

00:39:00.105 --> 00:39:02.270 to remain on such pharmacotherapy.  
NOTE Confidence: 0.831529855728149

00:39:02.270 --> 00:39:03.662 This case resonate with  
NOTE Confidence: 0.831529855728149

00:39:03.662 --> 00:39:04.706 you asleep physicians.  
NOTE Confidence: 0.831529855728149

00:39:04.710 --> 00:39:07.185 A 46 year old woman coming in with the  
NOTE Confidence: 0.831529855728149

00:39:07.185 --> 00:39:09.577 past medical history of hypertension,  
NOTE Confidence: 0.831529855728149

00:39:09.580 --> 00:39:10.624 anxiety, and depression.  
NOTE Confidence: 0.831529855728149

00:39:10.624 --> 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 --> 00:39:15.328 gerd, and metabolic syndrome.  
NOTE Confidence: 0.831529855728149

00:39:15.328 --> 00:39:16.863 She's history being on several  
NOTE Confidence: 0.831529855728149

00:39:16.863 --> 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 --> 00:39:23.806 fluoxetine does openemr transitional

NOTE Confidence: 0.831529855728149  
00:39:23.806 --> 00:39:25.926 attend law pre gabelein nortriptyline  
NOTE Confidence: 0.831529855728149  
00:39:25.926 --> 00:39:28.149 I think if this medicine thing doesn't  
NOTE Confidence: 0.831529855728149  
00:39:28.149 --> 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 --> 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 --> 00:39:39.000 and so this is my favorite case  
NOTE Confidence: 0.831529855728149  
00:39:39.056 --> 00:39:40.708 for this particular presentation.  
NOTE Confidence: 0.831529855728149  
00:39:40.710 --> 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 --> 00:39:45.990 and she comes down quite nicely here.  
NOTE Confidence: 0.831529855728149  
00:39:45.990 --> 00:39:49.100 I think we can say to a BMI of 26.  
NOTE Confidence: 0.831529855728149  
00:39:49.100 --> 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  
NOTE Confidence: 0.831529855728149

00:39:54.406 --> 00:39:56.810 patient and the clues are as follows.  
NOTE Confidence: 0.831529855728149

00:39:56.810 --> 00:39:58.186 She did have undiagnosed  
NOTE Confidence: 0.831529855728149

00:39:58.186 --> 00:39:59.218 obstructive sleep apnea,  
NOTE Confidence: 0.831529855728149

00:39:59.220 --> 00:40:01.628 did get seen by one of you.  
NOTE Confidence: 0.831529855728149

00:40:01.630 --> 00:40:02.659 Lovely sleep positions  
NOTE Confidence: 0.831529855728149

00:40:02.659 --> 00:40:04.717 shouldn't hi index of about 30.  
NOTE Confidence: 0.831529855728149

00:40:04.720 --> 00:40:07.573 Three when I sent her so she was started  
NOTE Confidence: 0.831529855728149

00:40:07.573 --> 00:40:10.338 on C Pap and the only other treatment  
NOTE Confidence: 0.831529855728149

00:40:10.338 --> 00:40:12.979 that I gave to her was metformin.  
NOTE Confidence: 0.831529855728149

00:40:12.980 --> 00:40:14.816 So metformin is the first line  
NOTE Confidence: 0.831529855728149

00:40:14.816 --> 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 --> 00:40:20.732 You could see that she had been on  
NOTE Confidence: 0.831529855728149

00:40:20.732 --> 00:40:22.524 several psychotropic agents for the  
NOTE Confidence: 0.831529855728149

00:40:22.524 --> 00:40:24.329 treatment of her bipolar disorder.  
NOTE Confidence: 0.831529855728149

00:40:24.330 --> 00:40:26.200 This response not with traditional

NOTE Confidence: 0.831529855728149  
00:40:26.200 --> 00:40:28.460 pharmacotherapy but with good old C Pap.  
NOTE Confidence: 0.831529855728149  
00:40:28.460 --> 00:40:31.508 Can metformin notice how I told  
NOTE Confidence: 0.831529855728149  
00:40:31.508 --> 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 --> 00:40:37.509 up from where they can stabilize it.  
NOTE Confidence: 0.831529855728149  
00:40:37.510 --> 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 --> 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 --> 00:40:45.520 Keeping their.  
NOTE Confidence: 0.887343764305115  
00:40:47.800 --> 00:40:50.985 Alright, so this is where she stabilized.  
NOTE Confidence: 0.887343764305115  
00:40:50.990 --> 00:40:53.478 This is a 34 year old woman passed  
NOTE Confidence: 0.887343764305115  
00:40:53.478 --> 00:40:55.168 with migraine headaches, asthma,  
NOTE Confidence: 0.887343764305115  
00:40:55.168 --> 00:40:55.864 Hypothyroidism, Depression,  
NOTE Confidence: 0.887343764305115  
00:40:55.864 --> 00:40:56.908 generalized anxiety disorder,  
NOTE Confidence: 0.887343764305115

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 --> 00:41:05.260 bulimia and of those there,  
NOTE Confidence: 0.887343764305115

00:41:05.260 --> 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 --> 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 --> 00:41:22.404 She has a history of suicidal ideations  
NOTE Confidence: 0.887343764305115

00:41:22.404 --> 00:41:24.297 Which we talked about a little  
NOTE Confidence: 0.887343764305115

00:41:24.297 --> 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

NOTE Confidence: 0.887343764305115  
00:41:27.490 --> 00:41:28.336 fluoxetine for depression.  
NOTE Confidence: 0.887343764305115  
00:41:28.340 --> 00:41:30.237 I do want to note the fluoxetine  
NOTE Confidence: 0.887343764305115  
00:41:30.237 --> 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 --> 00:41:42.800 So in this particular case,  
NOTE Confidence: 0.816940009593964  
00:41:42.800 --> 00:41:45.096 we have this woman that came in  
NOTE Confidence: 0.816940009593964  
00:41:45.096 --> 00:41:47.409 with initially a BMI of 37 comes  
NOTE Confidence: 0.816940009593964  
00:41:47.409 --> 00:41:49.293 down nicely with the BMI 25.5.  
NOTE Confidence: 0.816940009593964  
00:41:49.300 --> 00:41:50.920 This was with behavioral means,  
NOTE Confidence: 0.816940009593964  
00:41:50.920 --> 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 --> 00:41:57.416 so the body wants to defend that set point.  
NOTE Confidence: 0.816940009593964

00:41:57.420 --> 00:42:00.345 She came to me with a BMI of 32.  
NOTE Confidence: 0.816940009593964

00:42:00.350 --> 00:42:02.226 We bring her down to about 26.5  
NOTE Confidence: 0.816940009593964

00:42:02.226 --> 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 --> 00:42:08.150 on which many of you may  
NOTE Confidence: 0.816940009593964

00:42:08.150 --> 00:42:09.450 be familiar with doses.  
NOTE Confidence: 0.816940009593964

00:42:09.450 --> 00:42:11.442 Onus money may be less familiar  
NOTE Confidence: 0.816940009593964

00:42:11.442 --> 00:42:12.438 with its anticonvulsant.  
NOTE Confidence: 0.816940009593964

00:42:12.440 --> 00:42:13.076 That combination,  
NOTE Confidence: 0.816940009593964

00:42:13.076 --> 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 --> 00:42:18.975 It was first really published  
NOTE Confidence: 0.816940009593964

00:42:18.975 --> 00:42:20.860 in the literature back in 2007,  
NOTE Confidence: 0.816940009593964

00:42:20.860 --> 00:42:23.134 which is the citation you see  
NOTE Confidence: 0.816940009593964

00:42:23.134 --> 00:42:25.729 at the bottom of your screen.  
NOTE Confidence: 0.816940009593964

00:42:25.730 --> 00:42:28.054 I think we're getting to the end

NOTE Confidence: 0.816940009593964

00:42:28.054 --> 00:42:30.679 of the cases 60 year old man Dino,

NOTE Confidence: 0.816940009593964

00:42:30.680 --> 00:42:32.969 that I've only presented women so I

NOTE Confidence: 0.816940009593964

00:42:32.969 --> 00:42:35.122 wanted to make you men fill included

NOTE Confidence: 0.816940009593964

00:42:35.122 --> 00:42:37.995 here so we have a 60 year old man

NOTE Confidence: 0.816940009593964

00:42:37.995 --> 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 --> 00:42:44.315 You can see what he eats is

NOTE Confidence: 0.816940009593964

00:42:44.315 --> 00:42:45.860 not quite as virtuous.

NOTE Confidence: 0.816940009593964

00:42:45.860 --> 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 --> 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 --> 00:42:55.840 Similar hot dog pizza he eats.

NOTE Confidence: 0.816940009593964

00:42:55.840 --> 00:42:57.044 Chicken vegetable salad in  
NOTE Confidence: 0.816940009593964

00:42:57.044 --> 00:42:58.549 the evening and he's toast.  
NOTE Confidence: 0.816940009593964

00:42:58.550 --> 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 --> 00:43:06.070 and he's doing some afternoon calisthenics.  
NOTE Confidence: 0.816940009593964

00:43:06.070 --> 00:43:08.758 This is his graph which shows you that  
NOTE Confidence: 0.816940009593964

00:43:08.758 --> 00:43:11.484 he started off with me with a BMI of 57.  
NOTE Confidence: 0.816940009593964

00:43:11.490 --> 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 --> 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 --> 00:43:22.630 which you can see here is that he did not,  
NOTE Confidence: 0.816940009593964

00:43:22.630 --> 00:43:24.779 and I can tell you that almost  
NOTE Confidence: 0.816940009593964

00:43:24.779 --> 00:43:26.330 every patient that comes in.  
NOTE Confidence: 0.816940009593964

00:43:26.330 --> 00:43:27.990 With very severe obesity does

NOTE Confidence: 0.816940009593964  
00:43:27.990 --> 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 --> 00:43:35.960 which was still very severe.  
NOTE Confidence: 0.816940009593964  
00:43:35.960 --> 00:43:38.156 He did undergo a sleeve gastrectomy  
NOTE Confidence: 0.816940009593964  
00:43:38.156 --> 00:43:40.566 which is the VSG that you see  
NOTE Confidence: 0.816940009593964  
00:43:40.566 --> 00:43:42.589 here and you can see that he  
NOTE Confidence: 0.816940009593964  
00:43:42.662 --> 00:43:44.916 stabilizes here and a BMI of 37.  
NOTE Confidence: 0.816940009593964  
00:43:44.920 --> 00:43:46.248 He did pretty well.  
NOTE Confidence: 0.816940009593964  
00:43:46.248 --> 00:43:48.734 This is 58% of his excess body  
NOTE Confidence: 0.816940009593964  
00:43:48.734 --> 00:43:50.589 weight loss which is average  
NOTE Confidence: 0.816940009593964  
00:43:50.589 --> 00:43:52.669 response to a sleeve as between 55  
NOTE Confidence: 0.816940009593964  
00:43:52.669 --> 00:43:54.915 and 60% of excess excess would be  
NOTE Confidence: 0.816940009593964  
00:43:54.915 --> 00:43:56.870 everything above this BMI of 25.  
NOTE Confidence: 0.816940009593964  
00:43:56.870 --> 00:43:58.620 So we did pretty low.  
NOTE Confidence: 0.816940009593964

00:43:58.620 --> 00:44:00.408 But I added to pure made.  
NOTE Confidence: 0.816940009593964

00:44:00.410 --> 00:44:01.373 After he stabilized,  
NOTE Confidence: 0.816940009593964

00:44:01.373 --> 00:44:03.620 you can see that it is stabilized  
NOTE Confidence: 0.816940009593964

00:44:03.688 --> 00:44:05.774 over the course of about six months  
NOTE Confidence: 0.816940009593964

00:44:05.774 --> 00:44:08.038 to appear mate was added and we were  
NOTE Confidence: 0.816940009593964

00:44:08.038 --> 00:44:10.840 able to drive him down to a BMI of 30.  
NOTE Confidence: 0.816940009593964

00:44:10.840 --> 00:44:12.412 I published the largest studies to  
NOTE Confidence: 0.816940009593964

00:44:12.412 --> 00:44:14.226 date on the use of pharmacotherapy  
NOTE Confidence: 0.816940009593964

00:44:14.226 --> 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 --> 00:44:19.510 here from GH in combination with  
NOTE Confidence: 0.816940009593964

00:44:19.510 --> 00:44:21.815 the data that was provided by  
NOTE Confidence: 0.816940009593964

00:44:21.815 --> 00:44:23.850 Cornell Anlu erroneous group there.  
NOTE Confidence: 0.846121728420258

00:44:23.850 --> 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.

NOTE Confidence: 0.846121728420258  
00:44:30.830 --> 00:44:32.670 I think for questions 36 year old woman  
NOTE Confidence: 0.846121728420258  
00:44:32.670 --> 00:44:34.201 past medical history of hypothyroidism  
NOTE Confidence: 0.846121728420258  
00:44:34.201 --> 00:44:35.565 to stymie 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 --> 00:44:42.074 pretty active at the gym, as you can see,  
NOTE Confidence: 0.846121728420258  
00:44:42.074 --> 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 --> 00:44:48.829 When she comes in to see me,  
NOTE Confidence: 0.846121728420258  
00:44:48.830 --> 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 --> 00:44:56.624 down here to BMI of 29.5 but it takes  
NOTE Confidence: 0.846121728420258  
00:44:56.624 --> 00:44:59.306 us two years for us to get her there.  
NOTE Confidence: 0.846121728420258  
00:44:59.310 --> 00:45:00.780 Notice how she comes back.  
NOTE Confidence: 0.846121728420258  
00:45:00.780 --> 00:45:02.240 That's what century do appear.  
NOTE Confidence: 0.846121728420258

00:45:02.240 --> 00:45:04.039 Make who's back to a BMI of  
NOTE Confidence: 0.846121728420258

00:45:04.039 --> 00:45:05.760 36 and you might wonder.  
NOTE Confidence: 0.846121728420258

00:45:05.760 --> 00:45:06.984 OK, well what happened?  
NOTE Confidence: 0.846121728420258

00:45:06.984 --> 00:45:09.153 There are few clues on the slide  
NOTE Confidence: 0.846121728420258

00:45:09.153 --> 00:45:11.029 so she's a 36 year old woman.  
NOTE Confidence: 0.846121728420258

00:45:11.030 --> 00:45:12.495 She did decide that she  
NOTE Confidence: 0.846121728420258

00:45:12.495 --> 00:45:13.667 wanted to have children.  
NOTE Confidence: 0.846121728420258

00:45:13.670 --> 00:45:15.847 All of the medications with an exceptional  
NOTE Confidence: 0.846121728420258

00:45:15.847 --> 00:45:17.351 metformin are contraindicated during the  
NOTE Confidence: 0.846121728420258

00:45:17.351 --> 00:45:18.935 use of pregnancy and or breastfeeding.  
NOTE Confidence: 0.846121728420258

00:45:18.940 --> 00:45:21.140 So we took her off of these medications  
NOTE Confidence: 0.846121728420258

00:45:21.140 --> 00:45:23.582 an it took four months to regain the  
NOTE Confidence: 0.846121728420258

00:45:23.582 --> 00:45:25.970 weight that it took two years to lose.  
NOTE Confidence: 0.846121728420258

00:45:25.970 --> 00:45:28.133 So the chronic use of these medications  
NOTE Confidence: 0.846121728420258

00:45:28.133 --> 00:45:29.895 isn't even important outside of the  
NOTE Confidence: 0.846121728420258

00:45:29.895 --> 00:45:32.220 context of someone who is trying to conceive.

NOTE Confidence: 0.846121728420258  
00:45:32.220 --> 00:45:34.158 She was able to successfully conceive,  
NOTE Confidence: 0.846121728420258  
00:45:34.160 --> 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 --> 00:45:39.848 we want to track weight loss  
NOTE Confidence: 0.846121728420258  
00:45:39.848 --> 00:45:41.910 in terms of excess body weight.  
NOTE Confidence: 0.846121728420258  
00:45:41.910 --> 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 --> 00:45:49.658 and side effects of medications.  
NOTE Confidence: 0.846121728420258  
00:45:49.660 --> 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 --> 00:45:55.086 I will not start medications without  
NOTE Confidence: 0.846121728420258  
00:45:55.086 --> 00:45:57.059 a baseline of physical activity at  
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.  
NOTE Confidence: 0.846121728420258

00:46:01.290 --> 00:46:03.565 If a patient does have a superior  
NOTE Confidence: 0.846121728420258

00:46:03.565 --> 00:46:04.215 response to.  
NOTE Confidence: 0.846121728420258

00:46:04.220 --> 00:46:05.925 Pharmacotherapy which is 5 to  
NOTE Confidence: 0.846121728420258

00:46:05.925 --> 00:46:07.980 10% of total body weight loss.  
NOTE Confidence: 0.846121728420258

00:46:07.980 --> 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 --> 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 --> 00:46:18.577 I wrote a book here at MGH.  
NOTE Confidence: 0.846121728420258

00:46:18.580 --> 00:46:21.036 As you can see published by the MGA  
NOTE Confidence: 0.846121728420258

00:46:21.036 --> 00:46:22.756 Psychiatry Academy on facing overweight  
NOTE Confidence: 0.846121728420258

00:46:22.756 --> 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 --> 00:46:29.610 our goal was to kind of pull together  
NOTE Confidence: 0.846121728420258

00:46:29.610 --> 00:46:31.402 information for both clinicians and  
NOTE Confidence: 0.846121728420258

00:46:31.402 --> 00:46:33.622 for patients with regards to obesity.

NOTE Confidence: 0.846121728420258  
00:46:33.630 --> 00:46:34.902 If you are interested,  
NOTE Confidence: 0.846121728420258  
00:46:34.902 --> 00:46:36.810 this is available free for those  
NOTE Confidence: 0.846121728420258  
00:46:36.869 --> 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 --> 00:46:42.006 and if not this still available  
NOTE Confidence: 0.846121728420258  
00:46:42.006 --> 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 --> 00:46:48.869 you each for your time and attention.  
NOTE Confidence: 0.846121728420258  
00:46:48.870 --> 00:46:51.222 Hopefully you got a chance to see  
NOTE Confidence: 0.846121728420258  
00:46:51.222 --> 00:46:53.016 how patients respond to multiple  
NOTE Confidence: 0.846121728420258  
00:46:53.016 --> 00:46:54.099 forms of therapy.  
NOTE Confidence: 0.846121728420258  
00:46:54.100 --> 00:46:56.812 And I would love to take any questions  
NOTE Confidence: 0.846121728420258  
00:46:56.812 --> 00:46:59.340 at this time. Thank you so much.  
NOTE Confidence: 0.865126550197601  
00:47:01.460 --> 00:47:02.884 Thank you doctor Sanford,  
NOTE Confidence: 0.865126550197601  
00:47:02.884 --> 00:47:04.664 that was really just fantastic  
NOTE Confidence: 0.865126550197601

00:47:04.664 --> 00:47:06.858 overview that was filled with so much  
NOTE Confidence: 0.865126550197601

00:47:06.858 --> 00:47:08.429 information useful to all of us.  
NOTE Confidence: 0.865126550197601

00:47:08.430 --> 00:47:10.878 If anyone has questions you can take this  
NOTE Confidence: 0.865126550197601

00:47:10.878 --> 00:47:12.511 opportunity to please unmute yourselves  
NOTE Confidence: 0.865126550197601

00:47:12.511 --> 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 --> 00:47:19.848 I'll read it out for you.  
NOTE Confidence: 0.865126550197601

00:47:19.850 --> 00:47:22.378 Yes, so I'd like to ask a question.  
NOTE Confidence: 0.865126550197601

00:47:22.380 --> 00:47:26.921 This is Mayor Krieger. OK. Right,  
NOTE Confidence: 0.865126550197601

00:47:26.921 --> 00:47:30.990 so 70% of our of the patients that we see,  
NOTE Confidence: 0.865126550197601

00:47:30.990 --> 00:47:33.366 the routine patients we see with  
NOTE Confidence: 0.865126550197601

00:47:33.366 --> 00:47:35.843 with sleep apnea have obesity there  
NOTE Confidence: 0.865126550197601

00:47:35.843 --> 00:47:38.692 obese and don't use that word right?  
NOTE Confidence: 0.865126550197601

00:47:38.700 --> 00:47:40.760 We got rid of that.  
NOTE Confidence: 0.865126550197601

00:47:40.760 --> 00:47:41.840 They have obesity.  
NOTE Confidence: 0.865126550197601

00:47:41.840 --> 00:47:42.920 I got you.

NOTE Confidence: 0.865126550197601

00:47:42.920 --> 00:47:45.224 They're bigger than they would like

NOTE Confidence: 0.865126550197601

00:47:45.224 --> 00:47:48.611 to be an an an and we start them on

NOTE Confidence: 0.865126550197601

00:47:48.611 --> 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 --> 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 --> 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 --> 00:48:07.742 Maybe treat them with some of the

NOTE Confidence: 0.865126550197601

00:48:07.742 --> 00:48:09.920 medications that you mentioned absolutely.

NOTE Confidence: 0.865126550197601

00:48:09.920 --> 00:48:11.720 So if you're finding that

NOTE Confidence: 0.865126550197601

00:48:11.720 --> 00:48:12.800 they've maximized lifestyle?

NOTE Confidence: 0.865126550197601

00:48:12.800 --> 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,

NOTE Confidence: 0.865126550197601

00:48:18.240 --> 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 --> 00:48:22.880 You had Group One.  
NOTE Confidence: 0.865126550197601

00:48:22.880 --> 00:48:24.658 Let's say that was on a placebo  
NOTE Confidence: 0.865126550197601

00:48:24.658 --> 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 --> 00:48:32.458 agent with that same diet and  
NOTE Confidence: 0.865126550197601

00:48:32.458 --> 00:48:33.998 lifestyle really kind of managed.  
NOTE Confidence: 0.865126550197601

00:48:34.000 --> 00:48:35.988 I don't like to start the medications  
NOTE Confidence: 0.865126550197601

00:48:35.988 --> 00:48:37.400 without that being maximized,  
NOTE Confidence: 0.865126550197601

00:48:37.400 --> 00:48:38.900 especially since we know that we're  
NOTE Confidence: 0.865126550197601

00:48:38.900 --> 00:48:41.109 going to use these medications indefinitely.  
NOTE Confidence: 0.865126550197601

00:48:41.110 --> 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 --> 00:48:46.740 my patients are still struggling.

NOTE Confidence: 0.865126550197601

00:48:46.740 --> 00:48:48.420 The addition of pharmacotherapy can

NOTE Confidence: 0.865126550197601

00:48:48.420 --> 00:48:50.496 have significant could be a significant

NOTE Confidence: 0.865126550197601

00:48:50.496 --> 00:48:52.542 benefit for the patient with regards

NOTE Confidence: 0.865126550197601

00:48:52.542 --> 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 --> 00:48:58.695 but we that's those are the patients that

NOTE Confidence: 0.865126550197601

00:48:58.695 --> 00:49:00.829 the medications are really suited for,

NOTE Confidence: 0.865126550197601

00:49:00.830 --> 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 --> 00:49:05.824 often with an exception of that patient,

NOTE Confidence: 0.865126550197601

00:49:05.830 --> 00:49:08.021 that I showed you that was by

NOTE Confidence: 0.865126550197601

00:49:08.021 --> 00:49:08.960 far an exception,

NOTE Confidence: 0.865126550197601

00:49:08.960 --> 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.

NOTE Confidence: 0.865126550197601

00:49:15.540 --> 00:49:17.654 So I definitely would think about the  
NOTE Confidence: 0.865126550197601

00:49:17.654 --> 00:49:19.256 introduction of these medications and  
NOTE Confidence: 0.865126550197601

00:49:19.256 --> 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 you pick?  
NOTE Confidence: 0.865126550197601

00:49:24.070 --> 00:49:25.910 It depends on the person,  
NOTE Confidence: 0.865126550197601

00:49:25.910 --> 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 --> 00:49:33.724 So if it's a patient that has  
NOTE Confidence: 0.865126550197601

00:49:33.724 --> 00:49:35.838 let's say maybe pre diabetes,  
NOTE Confidence: 0.865126550197601

00:49:35.840 --> 00:49:37.480 hemoglobin A1C is 6.4.  
NOTE Confidence: 0.865126550197601

00:49:37.480 --> 00:49:39.940 I'm concerned about them with regards  
NOTE Confidence: 0.865126550197601

00:49:40.010 --> 00:49:42.836 that I might start a GOP one agonists if  
NOTE Confidence: 0.865126550197601

00:49:42.836 --> 00:49:45.407 their insurance allows me to cover it.  
NOTE Confidence: 0.865126550197601

00:49:45.410 --> 00:49:47.895 Getting over the idea of a daily  
NOTE Confidence: 0.865126550197601

00:49:47.895 --> 00:49:50.175 injection can be a barrier to

NOTE Confidence: 0.865126550197601

00:49:50.175 --> 00:49:52.075 some patients in addition to.

NOTE Confidence: 0.865126550197601

00:49:52.080 --> 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 --> 00:49:57.508 We do have decent coverage for many of the

NOTE Confidence: 0.817442357540131

00:49:57.508 --> 00:49:59.448 private insurers here in Massachusetts,

NOTE Confidence: 0.817442357540131

00:49:59.450 --> 00:50:00.980 but not from mass health.

NOTE Confidence: 0.817442357540131

00:50:00.980 --> 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 --> 00:50:06.816 which don't have that same level of coverage?

NOTE Confidence: 0.817442357540131

00:50:06.820 --> 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 --> 00:50:11.115 Very active patient might consider

NOTE Confidence: 0.817442357540131

00:50:11.115 --> 00:50:12.650 the introduction of finter mean,

NOTE Confidence: 0.817442357540131

00:50:12.650 --> 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

NOTE Confidence: 0.817442357540131

00:50:16.812 --> 00:50:18.352 the patient because phentramin can  
NOTE Confidence: 0.817442357540131

00:50:18.352 --> 00:50:20.317 increase blood pressure and heart rate.  
NOTE Confidence: 0.817442357540131

00:50:20.320 --> 00:50:22.360 I have them take their blood  
NOTE Confidence: 0.817442357540131

00:50:22.360 --> 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 --> 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 --> 00:50:33.452 our patient gateway in epic so that I  
NOTE Confidence: 0.817442357540131

00:50:33.452 --> 00:50:35.230 can see how the patient is responding.  
NOTE Confidence: 0.817442357540131

00:50:35.230 --> 00:50:36.868 Not just regards to their way.  
NOTE Confidence: 0.817442357540131

00:50:36.870 --> 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 --> 00:50:42.361 not causing any elevations of blood

NOTE Confidence: 0.817442357540131  
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 --> 00:50:46.647 so there's a little bit more work  
NOTE Confidence: 0.817442357540131  
00:50:46.647 --> 00:50:48.572 on that side is the cheapest of  
NOTE Confidence: 0.817442357540131  
00:50:48.572 --> 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 --> 00:50:55.050 For example, the tablet is covered.  
NOTE Confidence: 0.817442357540131  
00:50:55.050 --> 00:50:56.760 Very, very inexpensive for some reason.  
NOTE Confidence: 0.817442357540131  
00:50:56.760 --> 00:50:58.755 Also, if you use your AAA card,  
NOTE Confidence: 0.817442357540131  
00:50:58.760 --> 00:50:59.052 yes,  
NOTE Confidence: 0.817442357540131  
00:50:59.052 --> 00:51:01.096 the Carthage use of your car breaks  
NOTE Confidence: 0.817442357540131  
00:51:01.096 --> 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 --> 00:51:06.170 I'm are half off of phentramin  
NOTE Confidence: 0.817442357540131

00:51:06.170 --> 00:51:07.310 so that just depends.  
NOTE Confidence: 0.817442357540131

00:51:07.310 --> 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 --> 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 --> 00:51:15.218 but I never start more than  
NOTE Confidence: 0.817442357540131

00:51:15.218 --> 00:51:16.710 one agent at a time.  
NOTE Confidence: 0.817442357540131

00:51:16.710 --> 00:51:18.922 So just to give it just to  
NOTE Confidence: 0.817442357540131

00:51:18.922 --> 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 --> 00:51:30.579 and perspective on how complex this  
NOTE Confidence: 0.817442357540131

00:51:30.579 --> 00:51:33.464 diseases and so one of the questions  
NOTE Confidence: 0.817442357540131

00:51:33.464 --> 00:51:36.082 I have is mechanistic and it has  
NOTE Confidence: 0.817442357540131

00:51:36.090 --> 00:51:39.234 to do with leptin and sort of near

NOTE Confidence: 0.817442357540131  
00:51:39.234 --> 00:51:42.922 and dear to us as a sleep positions  
NOTE Confidence: 0.817442357540131  
00:51:42.922 --> 00:51:45.340 because leptin does have some.  
NOTE Confidence: 0.817442357540131  
00:51:45.340 --> 00:51:46.824 Function in restaurant control.  
NOTE Confidence: 0.817442357540131  
00:51:46.824 --> 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 --> 00:51:52.656 at least in animals and mice,  
NOTE Confidence: 0.817442357540131  
00:51:52.660 --> 00:51:54.892 showing that at least some hypothesis  
NOTE Confidence: 0.817442357540131  
00:51:54.892 --> 00:51:57.148 that perhaps it's really the resistance  
NOTE Confidence: 0.817442357540131  
00:51:57.148 --> 00:51:59.980 to left in the central resistance to leptin,  
NOTE Confidence: 0.817442357540131  
00:51:59.980 --> 00:52:02.535 that's causing some of the weight gain,  
NOTE Confidence: 0.817442357540131  
00:52:02.540 --> 00:52:04.370 and even some of the  
NOTE Confidence: 0.817442357540131  
00:52:04.370 --> 00:52:05.468 sleep disorder breathing.  
NOTE Confidence: 0.817442357540131  
00:52:05.470 --> 00:52:06.930 So I was wondering,  
NOTE Confidence: 0.817442357540131  
00:52:06.930 --> 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  
NOTE Confidence: 0.817442357540131

00:52:10.710 --> 00:52:13.328 leptin is due to resistance in the  
NOTE Confidence: 0.817442357540131

00:52:13.328 --> 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 --> 00:52:21.436 diagram of the two mechanisms by which  
NOTE Confidence: 0.817442357540131

00:52:21.436 --> 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 --> 00:52:27.030 resistance status for each patient?  
NOTE Confidence: 0.817442357540131

00:52:27.030 --> 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 --> 00:52:31.934 and one of the things that's was.  
NOTE Confidence: 0.817442357540131

00:52:31.940 --> 00:52:33.446 I guess the reason why I'm  
NOTE Confidence: 0.817442357540131

00:52:33.446 --> 00:52:35.641 going to be able to give you a  
NOTE Confidence: 0.817442357540131

00:52:35.641 --> 00:52:37.327 convoluted answer is that we don't  
NOTE Confidence: 0.807645440101624

00:52:37.387 --> 00:52:39.584 know. I think is the answer to that.  
NOTE Confidence: 0.807645440101624

00:52:39.590 --> 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?

NOTE Confidence: 0.807645440101624

00:52:43.683 --> 00:52:45.867 Like that's not one of our standard labs.

NOTE Confidence: 0.807645440101624

00:52:45.870 --> 00:52:48.600 When I even showed you guys the lapse to ask,

NOTE Confidence: 0.807645440101624

00:52:48.600 --> 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 --> 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 --> 00:52:56.249 to couple their other fasting labs.

NOTE Confidence: 0.807645440101624

00:52:56.250 --> 00:52:58.140 We don't really know for individual

NOTE Confidence: 0.807645440101624

00:52:58.140 --> 00:52:59.085 patients what's happening,

NOTE Confidence: 0.807645440101624

00:52:59.090 --> 00:53:00.974 and I'm sure that there's differences

NOTE Confidence: 0.807645440101624

00:53:00.974 --> 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 --> 00:53:04.752 for example,

NOTE Confidence: 0.807645440101624

00:53:04.752 --> 00:53:06.618 that have BMI's that are in

NOTE Confidence: 0.807645440101624

00:53:06.618 --> 00:53:08.555 these kind of higher 5060 range  
NOTE Confidence: 0.807645440101624

00:53:08.555 --> 00:53:10.421 that come in with no evidence,  
NOTE Confidence: 0.807645440101624

00:53:10.430 --> 00:53:12.242 for example of hyperinsulinism and then  
NOTE Confidence: 0.807645440101624

00:53:12.242 --> 00:53:14.477 patients that have very mild to moderate  
NOTE Confidence: 0.807645440101624

00:53:14.477 --> 00:53:16.097 obesity that have hyperinsulinism in.  
NOTE Confidence: 0.807645440101624

00:53:16.100 --> 00:53:17.894 I would assume the same is  
NOTE Confidence: 0.807645440101624

00:53:17.894 --> 00:53:19.560 true with left and right,  
NOTE Confidence: 0.807645440101624

00:53:19.560 --> 00:53:20.812 so that there's probably  
NOTE Confidence: 0.807645440101624

00:53:20.812 --> 00:53:22.064 variations that don't directly  
NOTE Confidence: 0.807645440101624

00:53:22.064 --> 00:53:23.660 correlate to one's weight status.  
NOTE Confidence: 0.807645440101624

00:53:23.660 --> 00:53:25.550 I think just having an understanding  
NOTE Confidence: 0.807645440101624

00:53:25.550 --> 00:53:26.495 of the complexity.  
NOTE Confidence: 0.807645440101624

00:53:26.500 --> 00:53:27.588 Of this disease process,  
NOTE Confidence: 0.807645440101624

00:53:27.588 --> 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,

NOTE Confidence: 0.807645440101624  
00:53:34.340 --> 00:53:36.300 and even with you guys asleep physicians,  
NOTE Confidence: 0.807645440101624  
00:53:36.300 --> 00:53:37.944 you know that people respond in  
NOTE Confidence: 0.807645440101624  
00:53:37.944 --> 00:53:39.886 terms of to see pap in different  
NOTE Confidence: 0.807645440101624  
00:53:39.886 --> 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 --> 00:53:45.990 all of these types of things that I  
NOTE Confidence: 0.807645440101624  
00:53:45.990 --> 00:53:48.234 would not be able to do very well  
NOTE Confidence: 0.807645440101624  
00:53:48.234 --> 00:53:50.299 because I'm not trained in that way.  
NOTE Confidence: 0.807645440101624  
00:53:50.300 --> 00:53:52.290 So I think that that so I gave you a  
NOTE Confidence: 0.807645440101624  
00:53:52.352 --> 00:53:54.042 convoluted answer because there's not  
NOTE Confidence: 0.807645440101624  
00:53:54.042 --> 00:53:56.731 a direct like clear cut answer, but.  
NOTE Confidence: 0.807645440101624  
00:53:56.731 --> 00:53:59.486 Hopefully that gives some guess  
NOTE Confidence: 0.807645440101624  
00:53:59.486 --> 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 --> 00:54:05.900 Just maybe a comment to for mayor.  
NOTE Confidence: 0.807645440101624

00:54:05.900 --> 00:54:07.304 One of the drugs,  
NOTE Confidence: 0.807645440101624

00:54:07.304 --> 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 --> 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 --> 00:54:16.176 breathing something that is delightful  
NOTE Confidence: 0.807645440101624

00:54:16.176 --> 00:54:19.492 so I Love Xena semide alot of so for  
NOTE Confidence: 0.807645440101624

00:54:19.492 --> 00:54:21.798 patients that so tapir made us better  
NOTE Confidence: 0.807645440101624

00:54:21.798 --> 00:54:24.038 studied in obesity I would say the  
NOTE Confidence: 0.807645440101624

00:54:24.038 --> 00:54:26.130 best of the two anticonvulsants studied.  
NOTE Confidence: 0.807645440101624

00:54:26.130 --> 00:54:28.260 But for patients that develop significant  
NOTE Confidence: 0.807645440101624

00:54:28.260 --> 00:54:29.680 issues with cognitive issues,  
NOTE Confidence: 0.807645440101624

00:54:29.680 --> 00:54:31.460 word finding difficulty for example  
NOTE Confidence: 0.807645440101624

00:54:31.460 --> 00:54:33.240 with tapir made or paresthesias  
NOTE Confidence: 0.807645440101624

00:54:33.296 --> 00:54:34.358 that are persistent.  
NOTE Confidence: 0.807645440101624

00:54:34.360 --> 00:54:36.516 I will switch them over to zonisamide.

NOTE Confidence: 0.807645440101624  
00:54:36.520 --> 00:54:38.015 The typical starting those frozen  
NOTE Confidence: 0.807645440101624  
00:54:38.015 --> 00:54:39.920 is my math published this letter.  
NOTE Confidence: 0.807645440101624  
00:54:39.920 --> 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 --> 00:54:45.759 if I'm using to appear meters in  
NOTE Confidence: 0.807645440101624  
00:54:45.759 --> 00:54:47.577 this amide and surgery for obesity  
NOTE Confidence: 0.807645440101624  
00:54:47.577 --> 00:54:48.880 and related diseases.  
NOTE Confidence: 0.807645440101624  
00:54:48.880 --> 00:54:51.352 So as soon as my starting those typically  
NOTE Confidence: 0.807645440101624  
00:54:51.352 --> 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 --> 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  
NOTE Confidence: 0.807645440101624  
00:54:57.535 --> 00:54:59.080 will say they sleep better.  
NOTE Confidence: 0.807645440101624  
00:54:59.080 --> 00:55:00.312 Having taken that either  
NOTE Confidence: 0.807645440101624  
00:55:00.312 --> 00:55:01.852 at dinner or at bedtime,  
NOTE Confidence: 0.807645440101624

00:55:01.860 --> 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 --> 00:55:06.854 25 milligrams for the two appear  
NOTE Confidence: 0.807645440101624

00:55:06.854 --> 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 --> 00:55:13.390 that maybe order 65 plus I am a  
NOTE Confidence: 0.807645440101624

00:55:13.390 --> 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 --> 00:55:19.348 milligram dose which was just introduced  
NOTE Confidence: 0.815939843654633

00:55:19.348 --> 00:55:22.149 in the market about three years ago or so.  
NOTE Confidence: 0.815939843654633

00:55:22.150 --> 00:55:24.088 So just to give some perspective,  
NOTE Confidence: 0.815939843654633

00:55:24.090 --> 00:55:26.253 Max dose for the treatment with zonisamide  
NOTE Confidence: 0.815939843654633

00:55:26.253 --> 00:55:28.528 will be 400 milligrams in the evening  
NOTE Confidence: 0.815939843654633

00:55:28.528 --> 00:55:31.164 that before castles on the Max dose that  
NOTE Confidence: 0.815939843654633

00:55:31.164 --> 00:55:33.446 typically will use for the treatment of  
NOTE Confidence: 0.815939843654633

00:55:33.446 --> 00:55:35.718 obesity with to appear mate would be.

NOTE Confidence: 0.815939843654633  
00:55:35.720 --> 00:55:38.594 About 1:50, although most people will  
NOTE Confidence: 0.815939843654633  
00:55:38.594 --> 00:55:41.506 unfortunately develop some side effects when  
NOTE Confidence: 0.815939843654633  
00:55:41.506 --> 00:55:44.266 they cross that 100 milligram threshold.  
NOTE Confidence: 0.815939843654633  
00:55:44.270 --> 00:55:47.063 So much, I think super a few  
NOTE Confidence: 0.815939843654633  
00:55:47.063 --> 00:55:48.800 minutes over the hour.  
NOTE Confidence: 0.815939843654633  
00:55:48.800 --> 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 --> 00:55:56.951 information and I can get a copy of your  
NOTE Confidence: 0.815939843654633  
00:55:56.951 --> 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 --> 00:56:06.037 you will find my step one review book,  
NOTE Confidence: 0.815939843654633  
00:56:06.040 --> 00:56:08.028 but you guys have all passed step  
NOTE Confidence: 0.815939843654633  
00:56:08.028 --> 00:56:09.750 one so don't buy that one.  
NOTE Confidence: 0.815939843654633  
00:56:09.750 --> 00:56:12.510 Like this, never do later.  
NOTE Confidence: 0.815939843654633

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 --> 00:56:21.898 Let me highlight next week talk.  
NOTE Confidence: 0.815939843654633

00:56:21.900 --> 00:56:24.324 We're going to have a talk by Caroline  
NOTE Confidence: 0.815939843654633

00:56:24.324 --> 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 --> 00:56:30.459 and Sleep Medicine at Stanford.  
NOTE Confidence: 0.815939843654633

00:56:30.460 --> 00:56:32.494 She's going to be speaking about  
NOTE Confidence: 0.815939843654633

00:56:32.494 --> 00:56:33.850 sleep concerns in pediatric  
NOTE Confidence: 0.815939843654633

00:56:33.908 --> 00:56:35.660 populations with special needs.  
NOTE Confidence: 0.815939843654633

00:56:35.660 --> 00:56:37.898 So Mark your calendars for that.  
NOTE Confidence: 0.815939843654633

00:56:37.900 --> 00:56:38.640 And also.  
NOTE Confidence: 0.877285242080688

00:56:51.250 --> 00:56:52.629 Well, I guess I think we're leaving.  
NOTE Confidence: 0.877285242080688

00:56:52.630 --> 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 --> 00:56:56.370 I wish you guys a wonderful day.

NOTE Confidence: 0.877285242080688

00:56:56.370 --> 00:56:58.320 Thanks so much.

NOTE Confidence: 0.877285242080688

00:56:58.320 --> 00:57:00.756 Bye bye take care thank you.

NOTE Confidence: 0.877285242080688

00:57:00.760 --> 00:57:02.630 Thanks for good question. Right?