## What Is Perimenopause? | Dr.Sara Gottfried & Dr. Andrew Huberman

To me this problem is not just menopause What's more interesting is to talk about perimenopause So perimenopause is the the period of time before your final menstrual cycle And for most women depending on how attuned you are to the symptoms it can last for 10 years So I'm still in period menopause It's been like 20 years because I've been tracking it so carefully It usually gets kicked off by having your cycle get closer together So that can happen in your thirties or your forties You go from 28 days to 25 days That sort of thing You may notice that you start sleeping more poorly because progesterone is so important You talked about that with Kyle you may notice it as more anxiety difficulty sleeping and that probably is related to the estrogen receptor So your alpha is uh estrogen receptor alpha is sio um it increases anxiety er beta is associated with an angiolytic activity and then there's a total of about six estrogen receptors Now there's the the G protein coupled estrogen receptors and those are mixed angiolytic angiogenic So um there's this whole period of perimenopause and what's most fascinating to me and we've got to talk about this either today or another time is that there is this massive massive change that happens in the female brain that people are not talking about enough And so looking at the work of Lisa Mosconi at Cornell from uh starting around age 40 there is this massive change in cerebral metabolism So you can do FDG PE T scans You can look at glucose uptake and there's about on average a 20% decline from premenopause You know up to like age 35 to period menopause to post menopause The women who are having the most symptoms in perimenopause menopause the hot flashes the night sweats the difficulties sleeping Those are the ones who have the most significant cerebral hypometabolism So it's almost like a um I don't I don't want to scare people with this language but it's it's a low level or let's call it pseudodementia of sorts Yes It seems to be a phenotype that you can then map to Alzheimer's disease because that's Lisa Mosconi S work she's looking at Ok Alzheimer's disease is not a disease of old age it is disease of middle age What are some of the biomarkers that we can define that can tell you what your risk is I've got a mother and a grandmother with Alzheimer's disease You can believe I am all over this data and insulin resistance part of sensitivity as we talked about it before Um seems to be somewhere in there Which I think when that first when that idea first surfaced a few people like

really But then of course right I mean the brain is just incredibly metabolically demanding organ You deprive neurons of fuel sources They or you make them less sensitive to fuel sources they start dying They they certainly start firing less It makes perfect sense And I think now it's thanks to Lisa's work work that you've that you've done and talked about quite a lot is um in your books and elsewhere I think has really you know highlighted for people that metabolism and metabol omics is going to be as important as genes and genomics when it comes to dementia perhaps especially in women Is it safe to say that I think I think so because we believe that the system is regulated by estrogen So the decline in estrogen starting around age 4043 is kind of the average seems to be the driver behind cerebral hypometabolism The way I describe it to my patients is it's like slow brain energy So you walk into a room you can't remember why Like you just notice that you can't manage all the tasks the way that you once could like things are just a little slower And I say that to women and they're like I have that like help me So this is then circling back to wh I where women are scared to death of taking hormone therapy And we've got all of these women that are marching toward potentially a greater risk of Alzheimer's disease And they have this opportunity in their forties and their fifties to take hormone therapy and they may not be offered it because the typical conventional approach based on wh I is to say unless you're having hot flashes and night sweats that are severe I'm not gonna give you hormone therapy And I I just want to call that out I would say no that is not the way to approach it further The concept right now in conventional medicine is that hot flashes and night sweats are these nuisance symptoms that we will take care of temporarily maybe with a little bit of estrogen and progesterone or a birth control pill because it's given a lot or that they pass or you know suck it up suck it up It doesn't matter that you're not sleeping anymore you know turn down the temperature in the room and that's not right because hot flushes and night sweats are a biomarker of cardio metabolic disease They are a biomarker of increased bone loss They are a biomarker of changes in the brain Uh So many of these symptoms that occur in perimenopause are not driven by the ovaries they are driven by the brain