

## PREVIEW 2\_ Priyanka Wali (Denver 2019)

**Dr. Priyanka Wali:** Women get a lot of attention when it comes to infertility and the causes of female infertility are far and wide. You can have pituitary issues, you can have medical issues or medication issues.

From an insulin standpoint, polycystic ovarian syndrome is the most common cause of infertility in women and as Dr. Fung pointed out in his talk earlier, polycystic ovarian syndrome is essentially insulin resistance at the level of the ovaries.

You have chronically elevated insulin levels that then send signals to the ovaries to increase the production of androgens. The excess androgens lead to increased abdominal fat, the abdominal fat then worse is influence inflammation and insulin resistance and it's just a vicious cycle that goes on and on and on.

To reverse the PCOS you must reverse the insulin resistance and to reverse the insulin resistance you must eat low-carb and these hormones then play a role with fertility. There's only two small studies that have been done that looked at a well formulated ketogenic diet and its impact on women in PCOS and their ability to have children.

The first study was a 24 week intervention. They took 11 women with PCOS and they put them on a true ketogenic diet, less than 20 grams carbs.

Only five of these women were actually able to see through and complete the study, but they all had improvements in their hormonal profiles including fasting insulin and then two ended up going on and conceiving without the use of any fertility medications.