

Hi everyone. Raise your hand if you have ever taken a homeopathic remedy! Okay, now, how many of you like mushrooms? Awesome, you will see where I am going with that in a minute. So, it's important to consider how these homeopathic remedies might affect you throughout different stages of your life.

One of these important stages is during pregnancy. This is a time when the placenta, a temporary but essential organ, serves as a personal assistant for a growing baby inside the mom's belly. It helps pass on good stuff like nutrients and removes the not-so-good stuff like waste between the mom and baby's circulation. Now, it's crucial to figure out if anything the mom ingests affects the baby, and that's where the placenta comes in.

The placenta is made up of different cell types, each with its specific job during pregnancy. Think of these cells as employees in a company, making sure everything runs smoothly. But when these employees don't do their jobs right, it can be a big problem for the company, aka both mom and baby.

Now, let's chat about mushrooms. People have been using mushrooms for their health benefits for a long time, specifically over 2000 years. Reishi mushrooms have an ingredient called triterpenoids, which studies have shown can fight cancer, lower cholesterol, and boost your immune system.

There's this specific kind of triterpenoid called Ganoderic acid D (GAD for short), and it has been shown to be good at killing certain cancer cells. With more than 200 million people around the world using homeopathic remedies, it's surprising that we haven't really looked into how these triterpenoids might affect pregnant women and their babies.

So, we're on a mission to determine if GAD affects the employees or cells in the placenta and whether it's ok for mom and baby.

To do that, we're growing immortalized cell lines that are representative of the placenta in the lab. These cells can continue to live forever, which makes them great to conduct research with. But here's the catch: they might not act exactly like the real employees in the placenta. So, while they're helpful, they're not a perfect match for the real deal. But don't worry—we plan to use primary cells from the placenta of pregnant mice soon to see if the effects are the same.

In a nutshell, we're trying to determine if this mushroom is safe for the mush-womb. So far, we have not observed that GAD impacts the placenta, which suggests that it might be safe to ingest while you are pregnant! Thanks for listening!