Conclusions
Administration of AfB1 during prenatal or adult period results in, a significant:

- reduction in the body weight by affecting the general metabolism.
- decrease in the weight of the testis and accessory sex organs such as epididymis and seminal vesicles.
- decline in daily sperm production along with the decrease in epididymal sperm count, and deteriorated sperm quality.
- decrease in the serum testosterone levels through inhibition of testicular steroidogenesis.
- elevation in oxidative stress as evidenced by increased lipid peroxidation
- deterioration in testicular architecture and
- reduction in fertility output as evidenced by decreased number of implantations in females mated with AfB1 exposed males.

*In silico* studies revealed, AfB1 binds to StAR thereby hinder cholesterol transport in that way affect the testosterone synthesis in adult rats. AfB1 might operate epigenetically to suppress androgen biosynthesis in rats exposed to AfB1 during embryonic development.

The decrease in androgen levels and/or elevated lipid peroxidation might be responsible for the suppressed reproduction in AfB1 exposed rats.