

## The Effects Of Tualang Honey On Sperm Profile In High Cholesterol Diet Induction Animal Model

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# OUTLINE

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- OBJECTIVE
- METHODS
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# BACKGROUND

**HYPERCHOLESTEROLAEMIA**

**MALE INFERTILITY**

*Whitfield et al., 2015*

MAIN RISK FACTOR:  
**-HIGH CHOLESTEROL DIET**



**TUALANG HONEY  
SUPPLEMENT**

**Contains more flavonoids  
& phenolic acids:  
anti-oxidative &  
anti-inflammatory**

*(Ismail et al., 2014)*

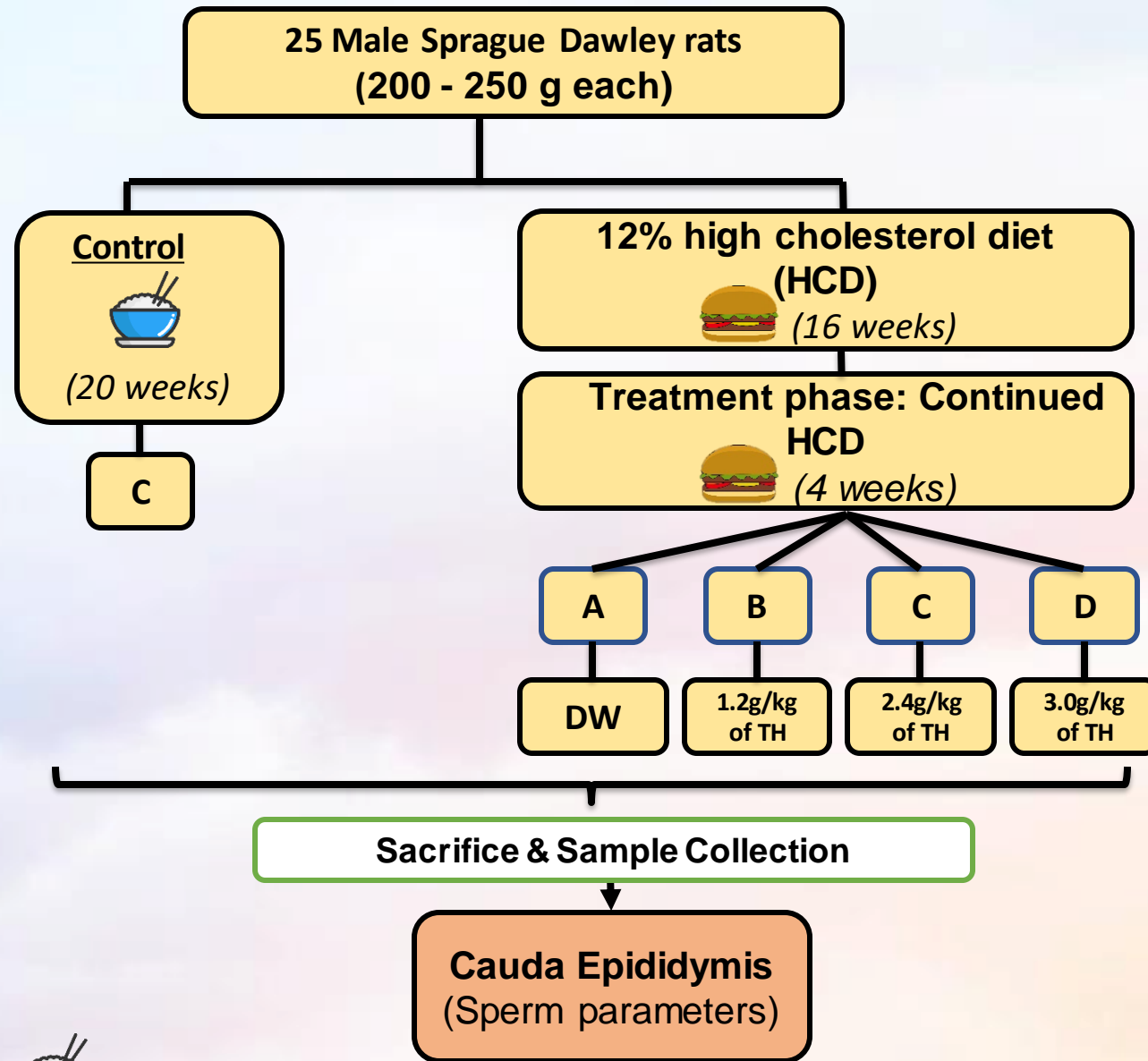
**SPERM PARAMETERS:**

- SPERM CONCENTRATION
- SPERM VIABILITY
- SPERM MOTILITY
- SPERM PROGRESSIVE MOTILITY

# **OBJECTIVE**

- ♣ This study aimed to determine the effects of TH on the sperm parameters of high cholesterol diet administered rats.
- ♣ Promote the use of alternative medicine in the management of male infertility.

# METHODS



Normal diet: standard rat pellet



12% high cholesterol diet (powdered)

DW: Distilled water

TH: Tualang Honey

# RESULTS

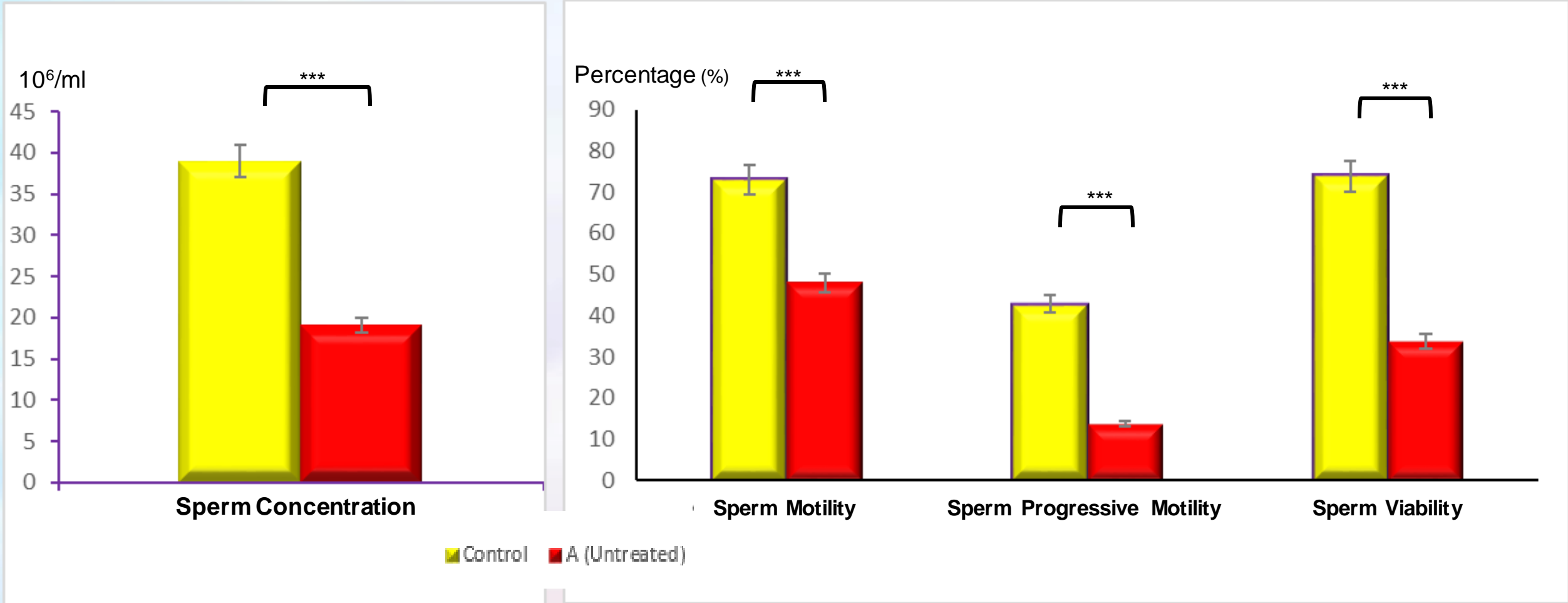


Figure 1: Mean (SD) sperm parameters of Control and Group A (untreated).

\*\*\*: p<0.001

# RESULTS

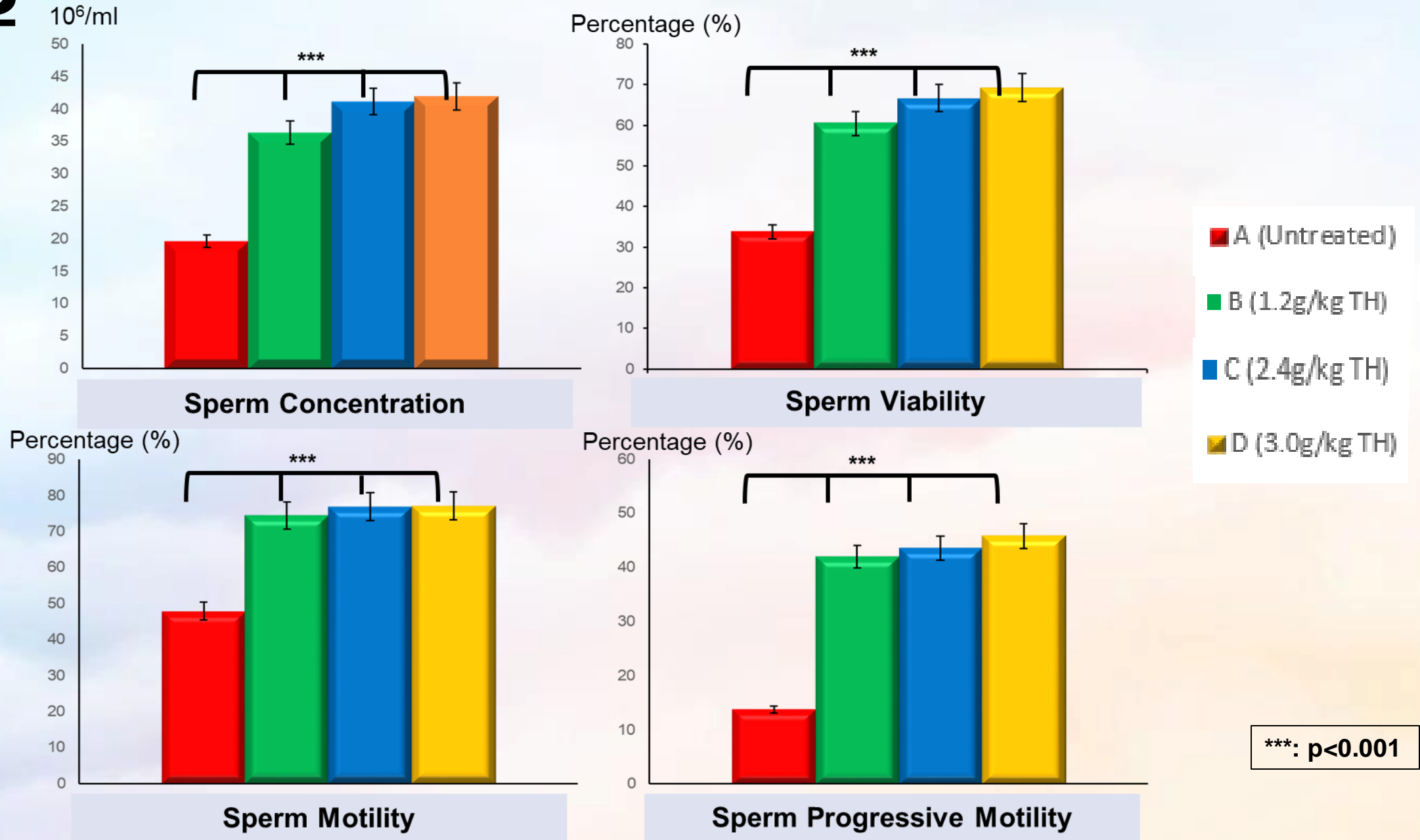
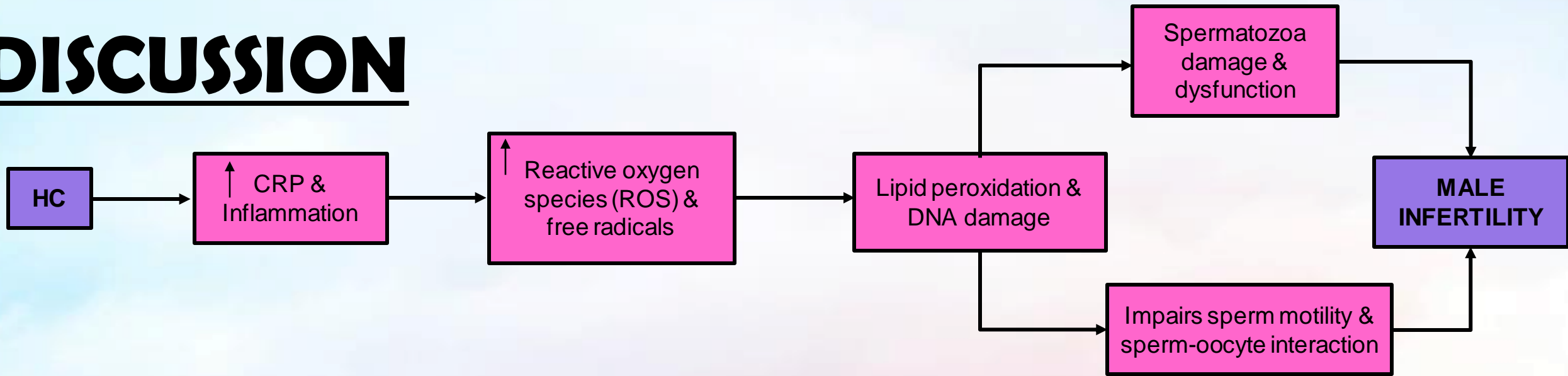
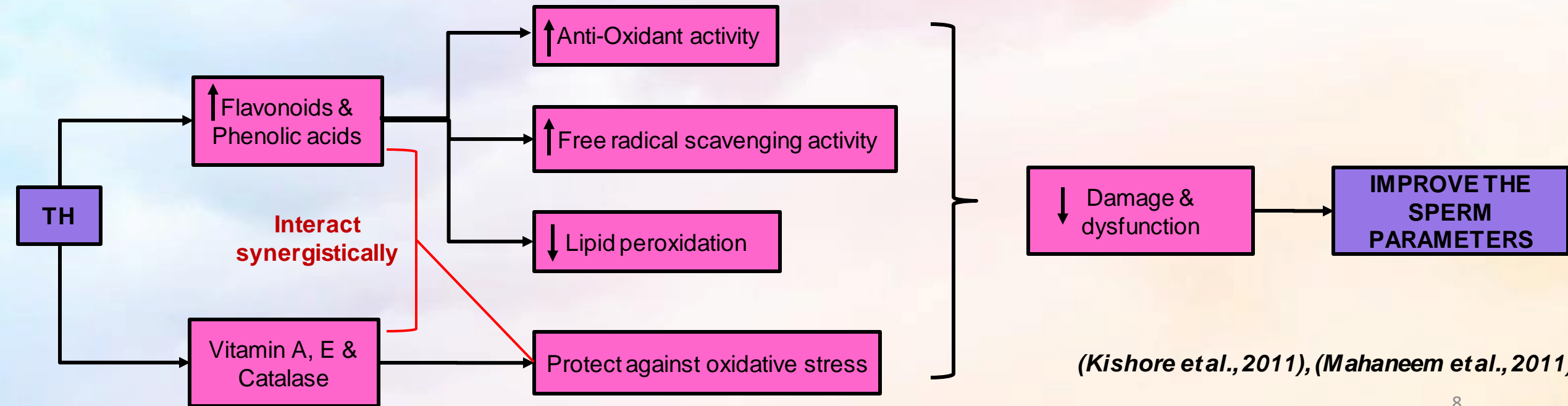


Figure 2: Mean (SD) sperm parameters of Group A, B, C and D.

# DISCUSSION



*(Sedes et al., 2018)*



*(Kishore et al., 2011), (Mahaneem et al., 2011)*



# CONCLUSION

♣ TH supplementation of high cholesterol diet administered rats



♣ Improved the sperm parameters

♣ The higher the dosage



♣ The higher the improvement of sperm parameters

♣ Further explore the potential of TH in improving male infertility

# LIMITATIONS

♣ Further study should be done on the effects of TH to:

♣ Sperm morphology, testicular histological changes and hormone such as testosterone, Follicular Stimulating Hormone (FSH) and Luteinizing Hormone (LH).

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# THANK YOU