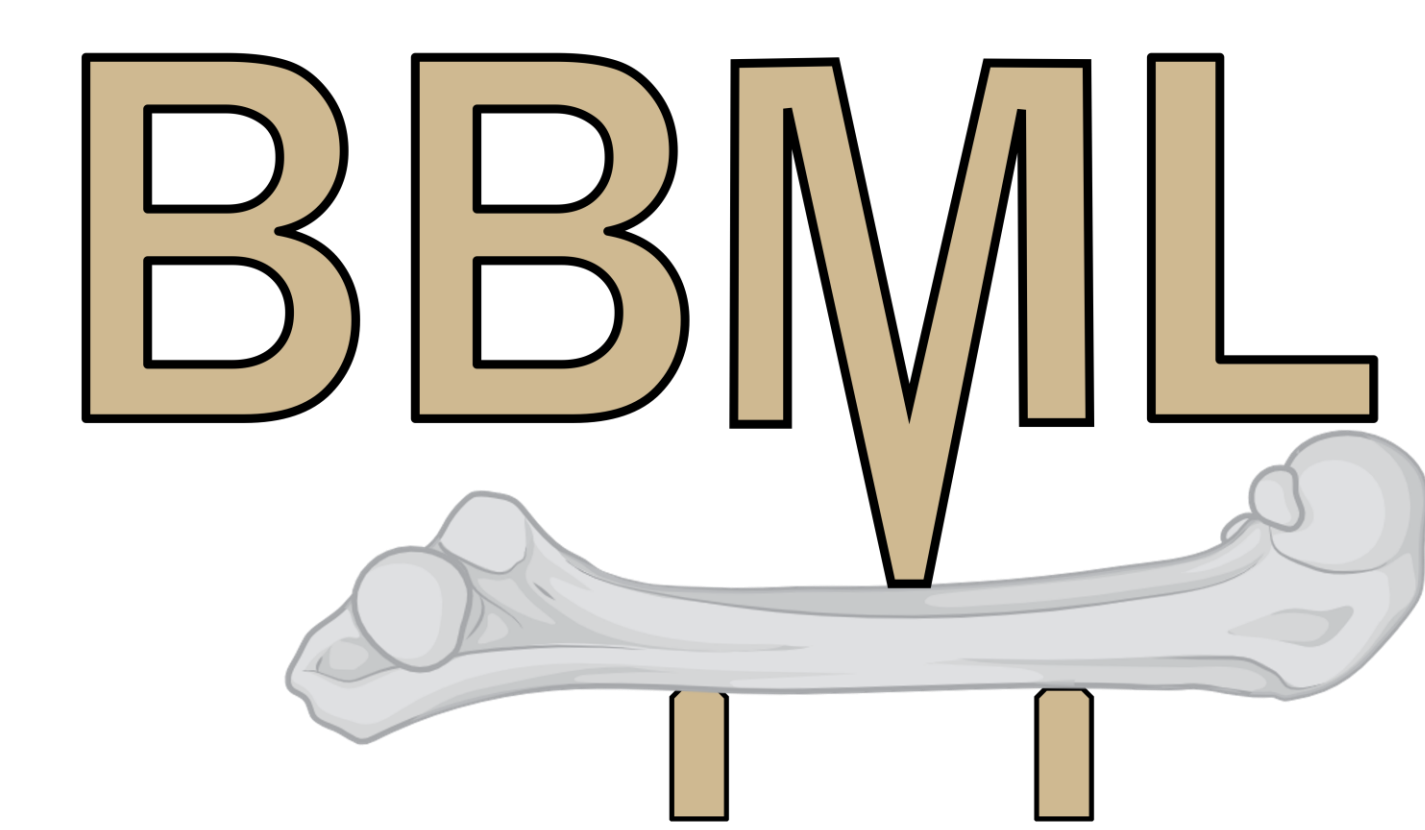


# EVEN MODEST CHANGES IN DIET COMPOSITION IMPACT METABOLIC AND SKELETAL OUTCOMES IN THE YELLOW KURO KONDO (KK-AY) MURINE MODEL OF TYPE 2 DIABETES (T2D)

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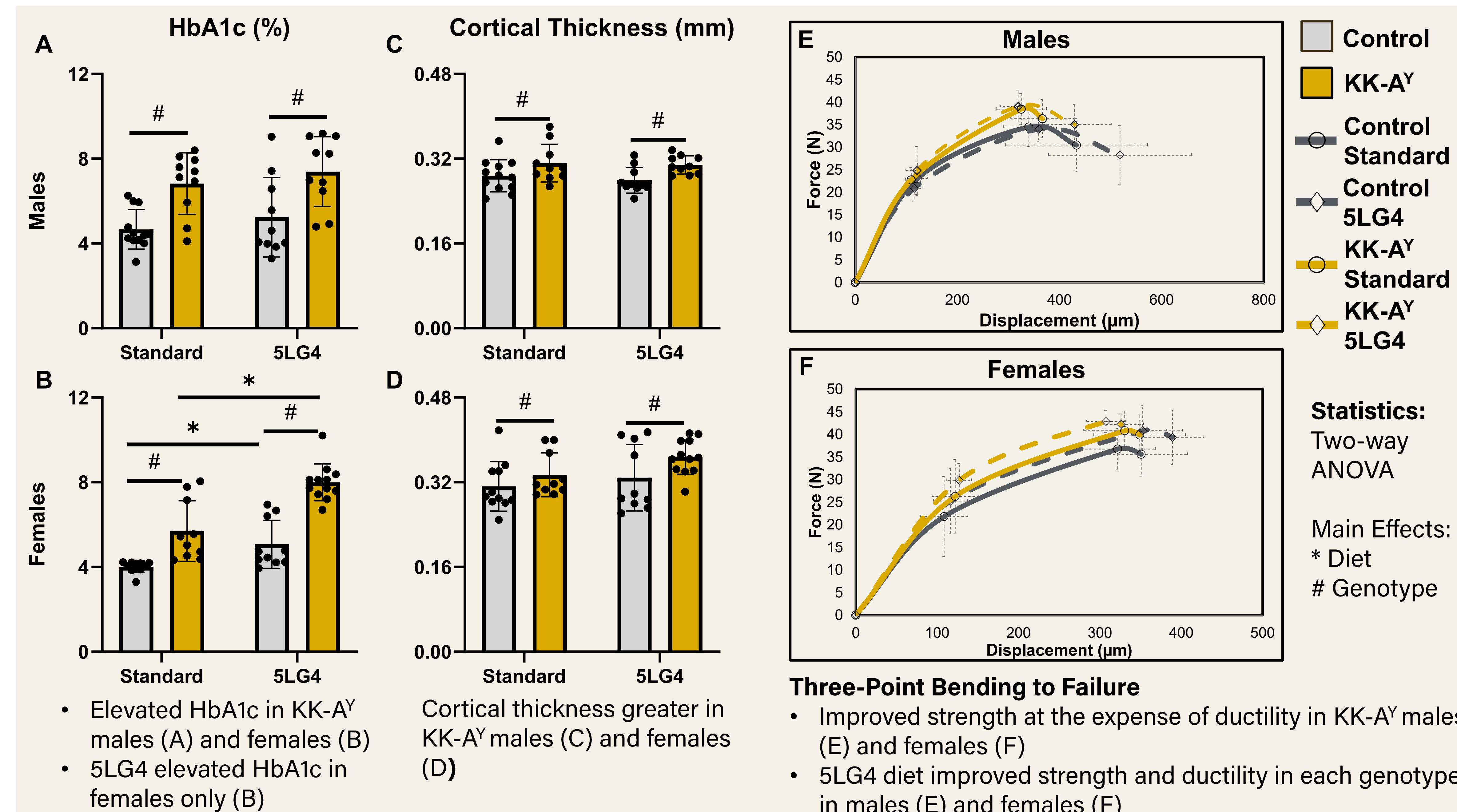
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## Abstract

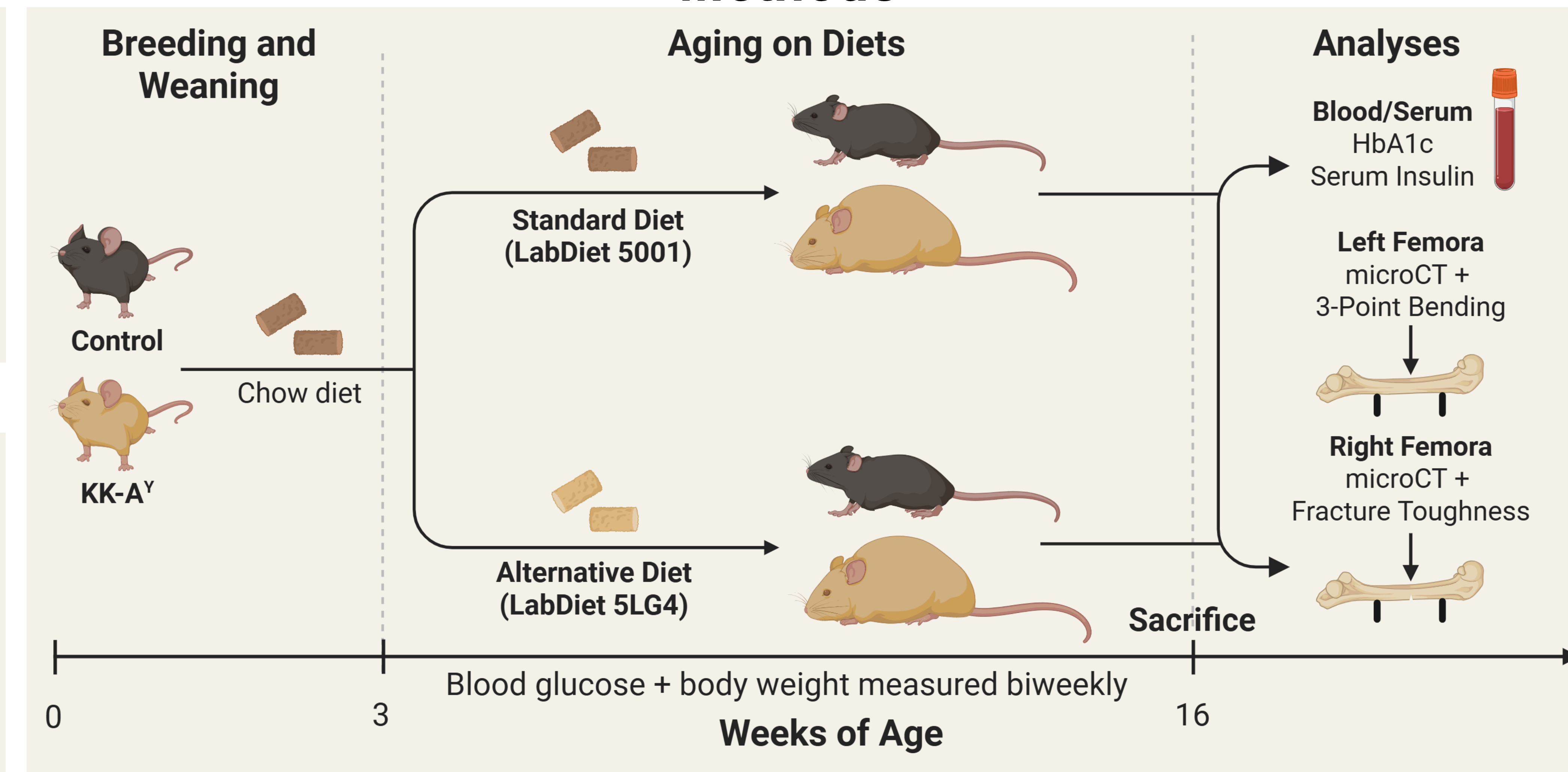
- **1 in 9 Diabetic Adults Worldwide:** Type 2 diabetics (T2D) > 90% of cases [1]
- **T2D Characteristics:** Insulin resistance, hyperglycemia, & elevated fracture risk despite normal or elevated BMD [2], [3]
- **KK-AY Model [4] used to assess source of fracture risk:** Pilot studies suggest diet dependency of KK-AY Model

**Hypothesis:** T2D metabolic (hyperglycemia, obesity, elevated HbA1c) and skeletal characteristics (increased bone size & fracture risk) are dependent on diet in the KK-AY murine model of T2D

## Results



## Methods



## Conclusions

The **KK-AY** model is impacted by diet in a **sex-dependent** manner

- **KK-AY, 5LG4 females** had the most **compelling metabolic T2D** outcomes
- Control, Standard females were the **only normoglycemic** (Blood Glucose < 250 mg/dL) **group**
- Improved cortical properties with lower mechanics **model T2D bone phenotype**
- **Females are ideal** in the use of the KK-AY with implementation of KK-AY, 5LG4 as a model of T2D and Control, Standard as the non-diabetic control
- Quality effects should be assessed further

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## References



## Contact

