

Introduction

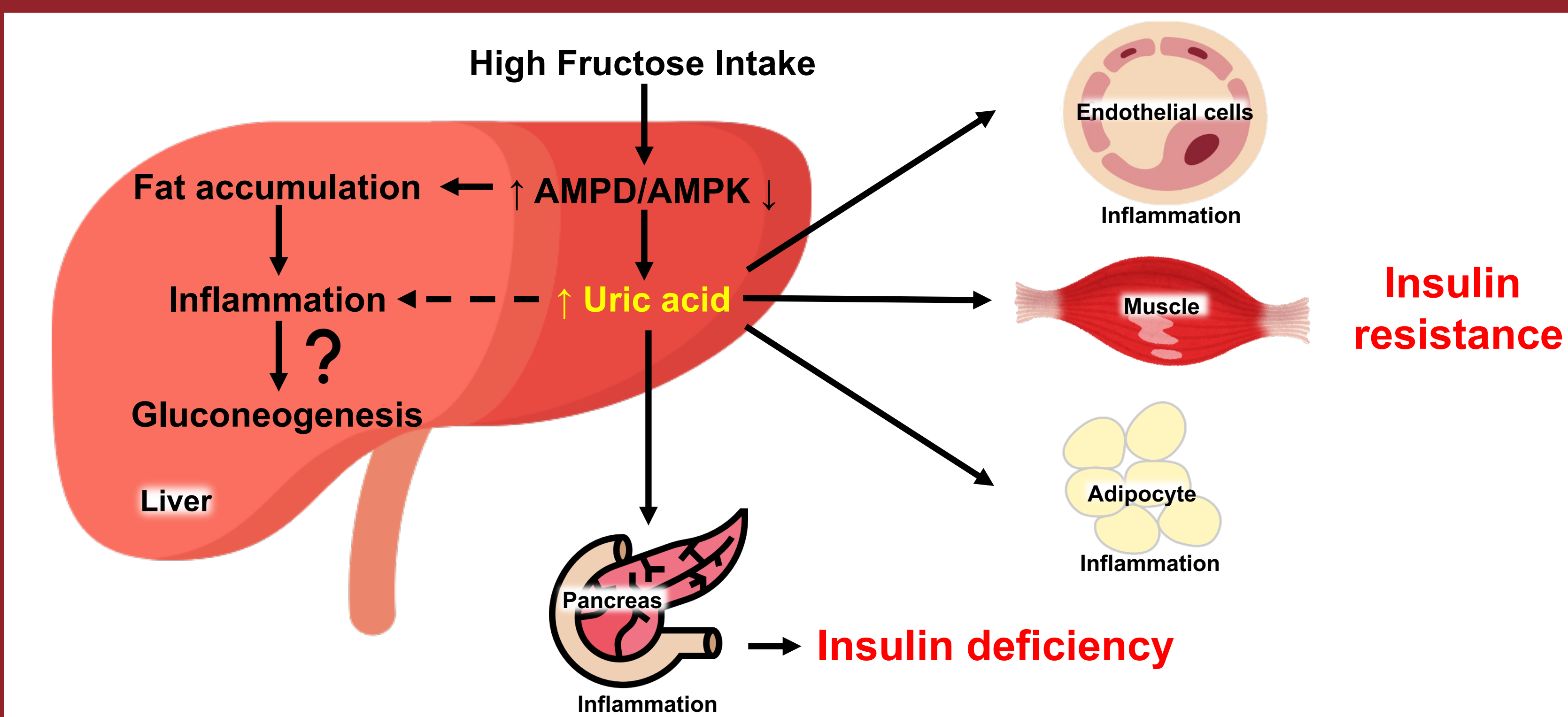


Figure 1. Long-term high uric acid may lead to abnormal insulin function, and eventually resulting in insulin resistance.

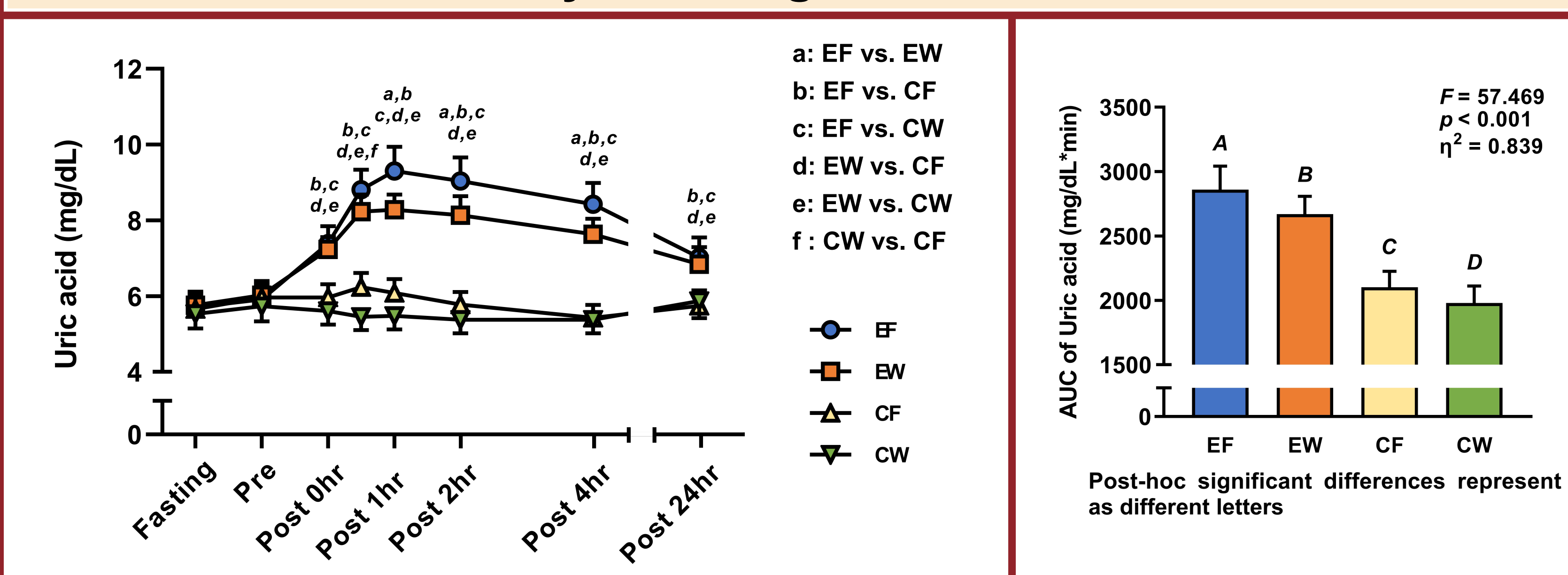


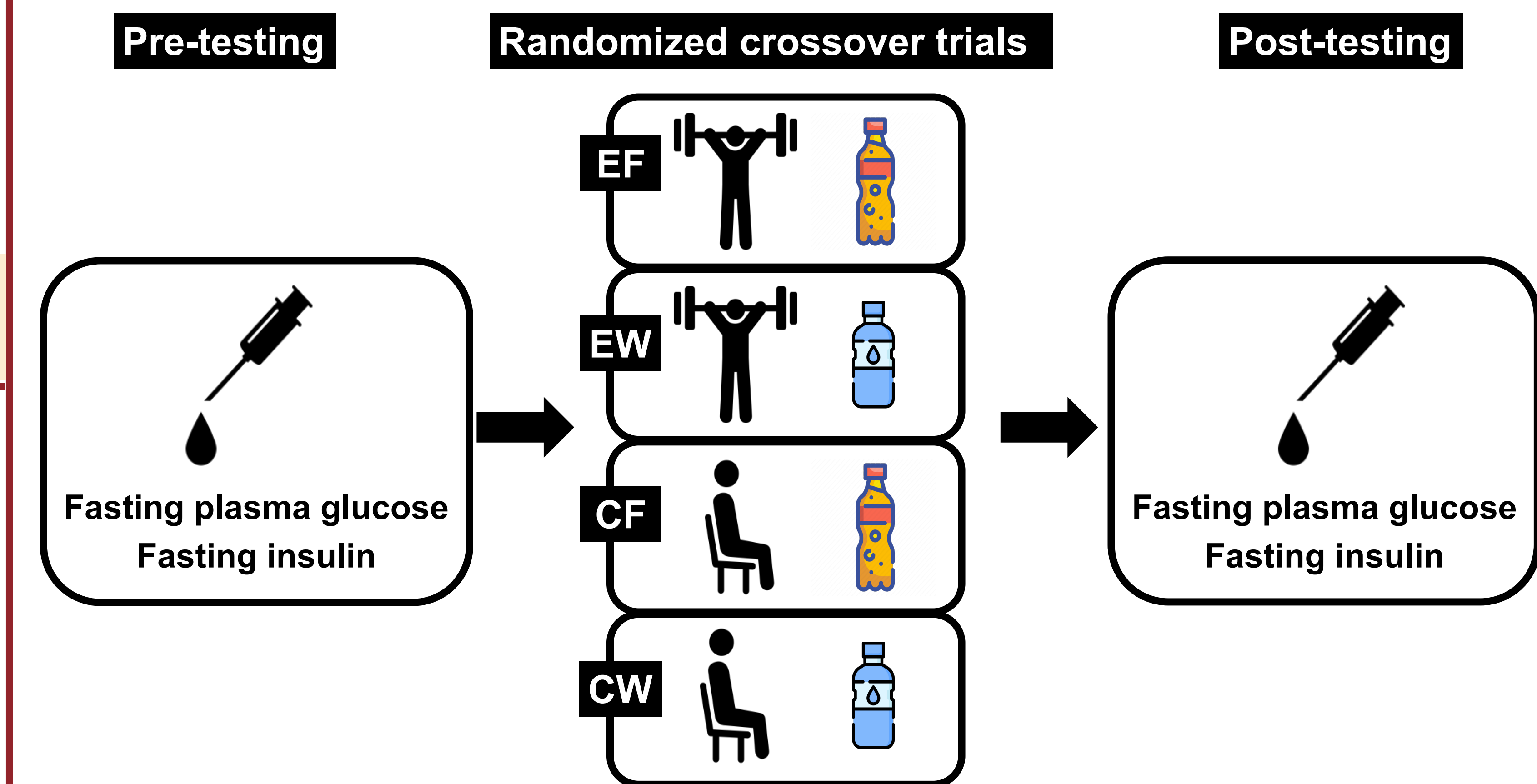
Figure 2. Fructose intake after resistance exercise (RE) may cause hyperuricemia.

Purpose

We investigated the effects of high fructose intake on glucose regulation under different experimental trials.

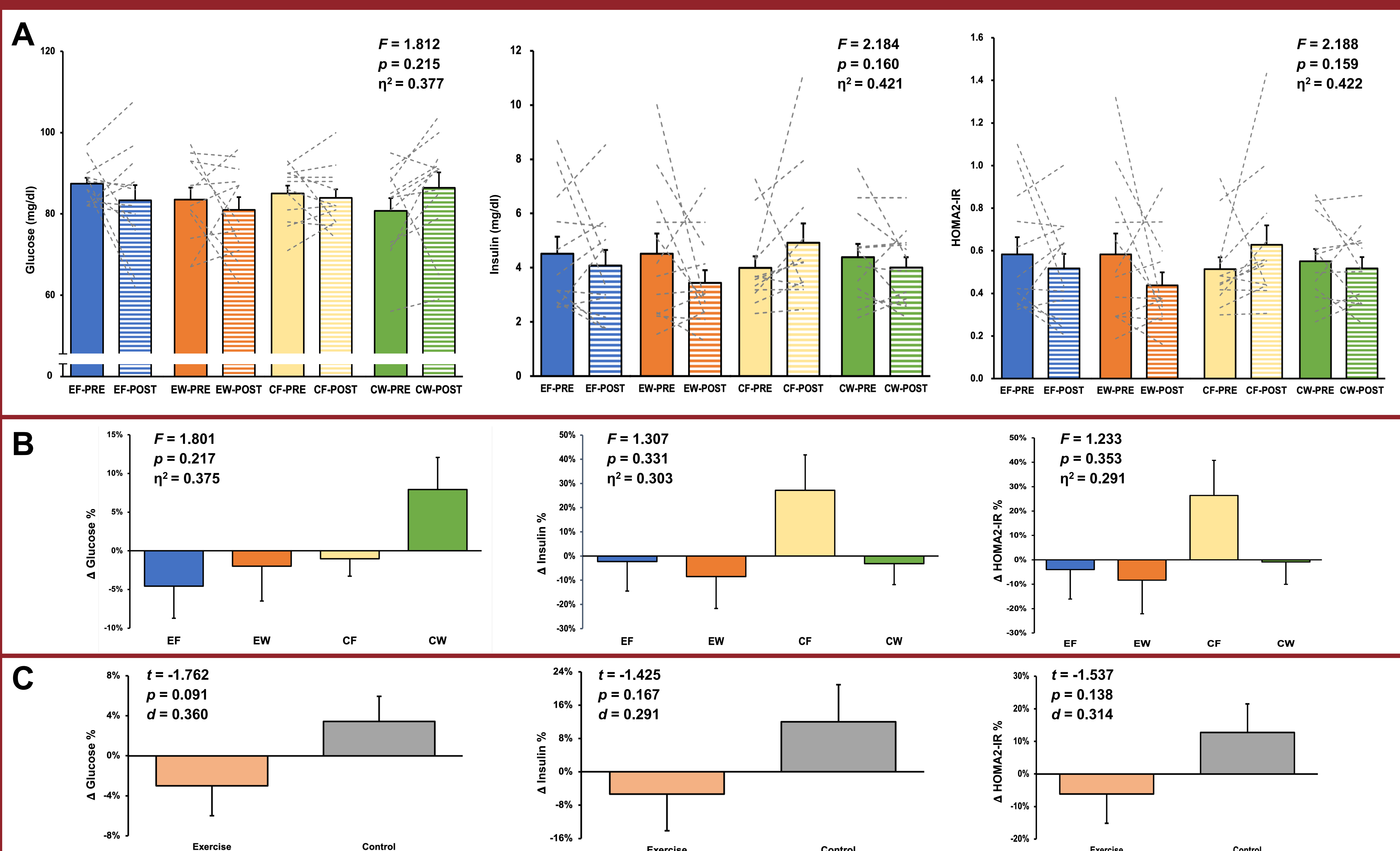
Methods

- Participants: 12 Healthy young men (aged 20-27)
- Process:



- ✓ Resistance exercise (RE): deadlift, bench press, squat, and row
- ✓ Exercise intensity: 70% 1RM 4 sets (8 repetitions for the first 3 sets, and the last set to failure)

Results



- There were no significant changes in fasting plasma glucose (FPG) and insulin levels and insulin resistance index (HOMA2-IR) between the four trials ($p > 0.05$).
- There were no significant changes in fasting plasma glucose (FPG) and plasma insulin and insulin resistance index (HOMA2-IR) between RE group and non-exercise group ($p > 0.05$).

- ✓ EF: Fructose intake after RE
- ✓ EW: Water intake after RE
- ✓ CF: Fructose intake without exercise
- ✓ CW: Water intake without exercise

Conclusions & Future work

- High fructose intake after acute RE does not impair glucose regulation in healthy young men.
- However, we still need to confirm whether short-term (6-8weeks) high fructose intake after RE affects glucose regulation.
- Further studies may need to investigate the effects of high fructose intake after RE on glucose regulation in different age, sex, diabetic.