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Diacylated anthocyanins from purple sweet potato (*Ipomoea batatas* L.) attenuate hyperglycemia and hyperuricemia in mice induced by a high-fructose/high-fat diet

Keywords：Diacylated anthocyanins from purple sweet potato (diacylated AF-PSP); Hyperglycemia; Hyperuricemia; Metabolism syndrome; Renal function regulation

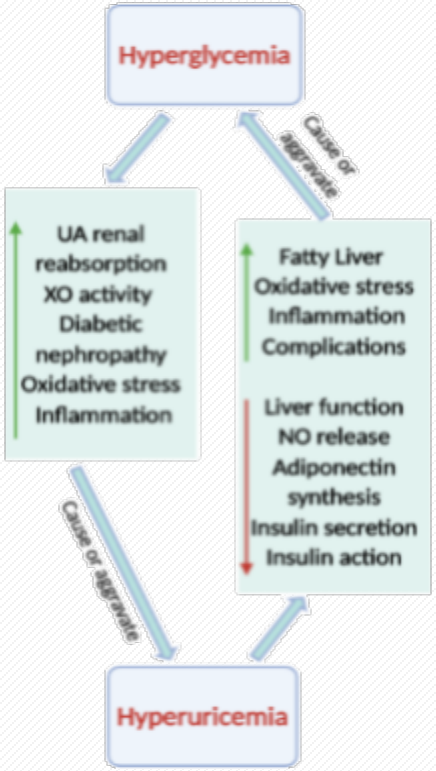
JZUS-B

Innovation points

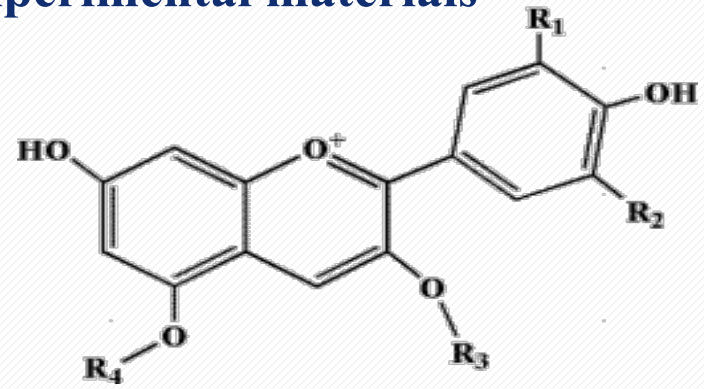
- XO as a target could be used to treat hyperuricemia then dually hyperglycemia in mice induced by high fructose/high fat diet.

- Diacylated AF-PSP alleviated hyperuricemia and improved hyperglycemia in mice, which might be related to the regulation of liver XO activity, lipid accumulation and relevant renal transporters.

- The article proposes to investigate Diacylated AF-PSP to reveal the mechanisms of dual regulation of blood glucose and uric acid.



Experimental materials



Berry fruits and cherries

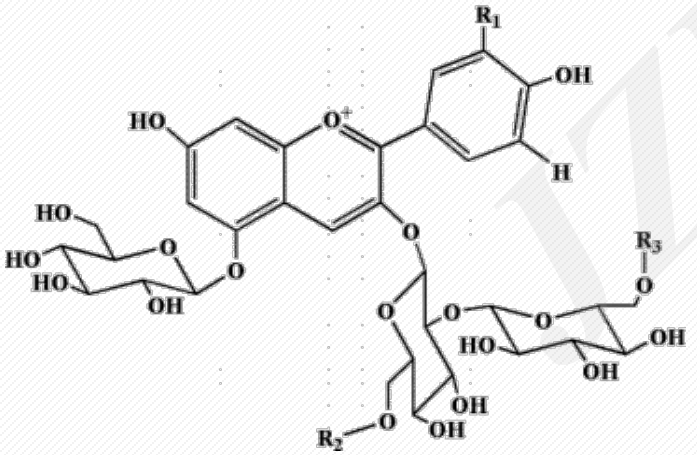
non-acylated small molecule anthocyanins

R_1=OCH_3/OH

R_2=H/OH/OCH_3

R_3=glucoside/galactoside/xyloside/arabinoside/ rutinoside/ambubioside/diglucoside

R_4=H/glucoside



Purple sweet potato

acylated macromolecular anthocyanins

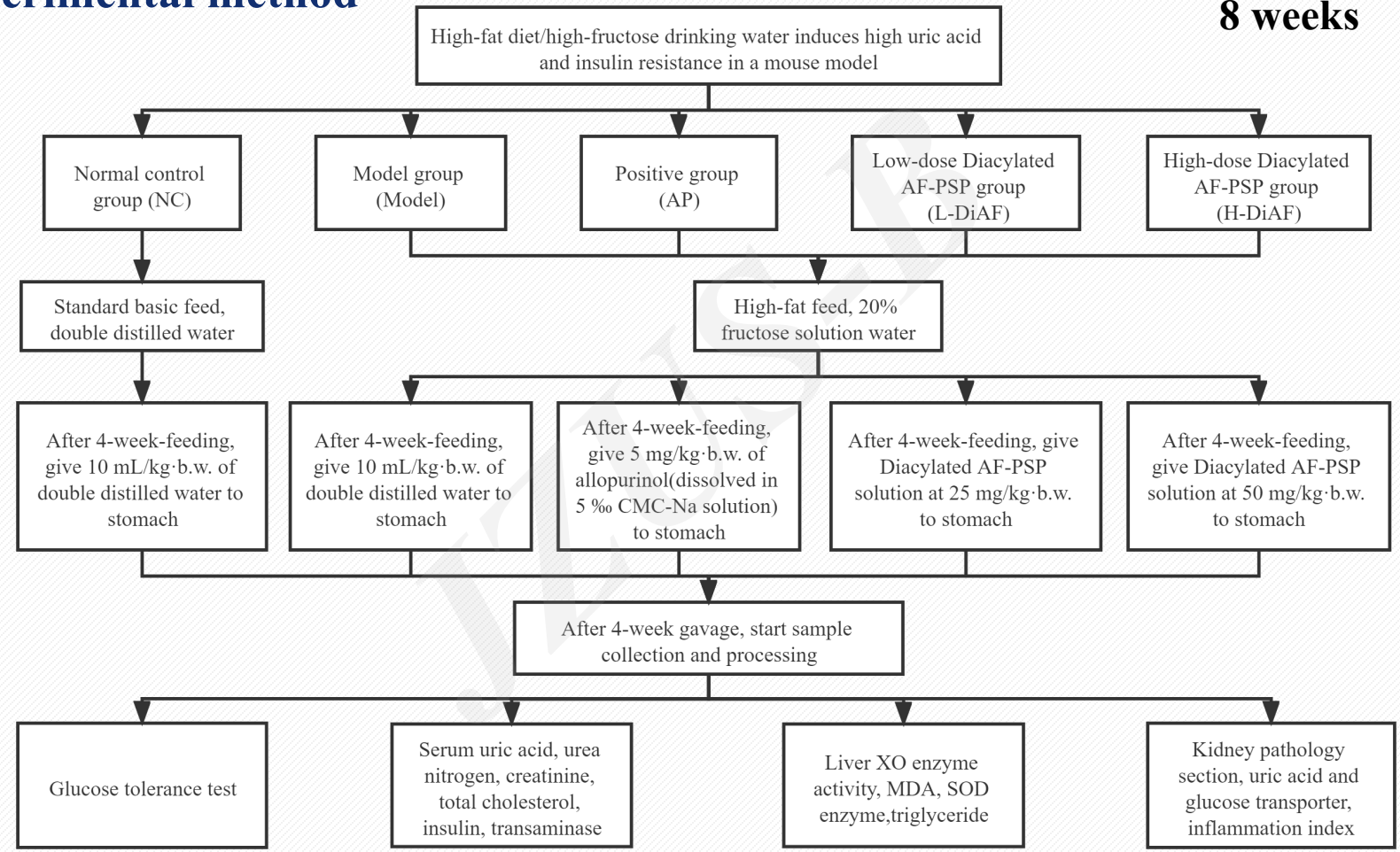
R_1=OCH_3/OH

R_2=H/caffeoyl/feruloyl/coumaryl/p-hydroxybenzoyl

R_3=H/caffeoyl/feruloyl/coumaryl/p-hydroxybenzoyl

Diacylated anthocyanins from purple sweet potato (Diacylated AF-PSP)

Experimental method



Research summary

