

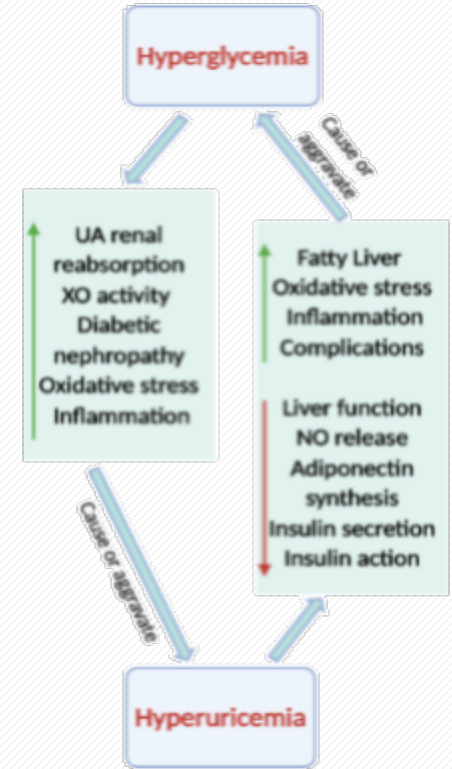
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Diacylated anthocyanins from purple sweet potato (*Ipomoea batatas* L.) attenuate hyperglycemia and hyperuricemia in mice induced by a high-fructose/high-fat diet

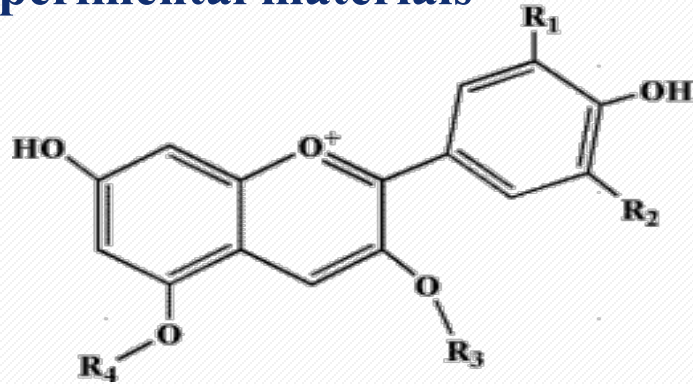
Keywords: Diacylated anthocyanins from purple sweet potato (diacylated AF-PSP);
Hyperglycemia; Hyperuricemia; Metabolism syndrome; Renal function regulation

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

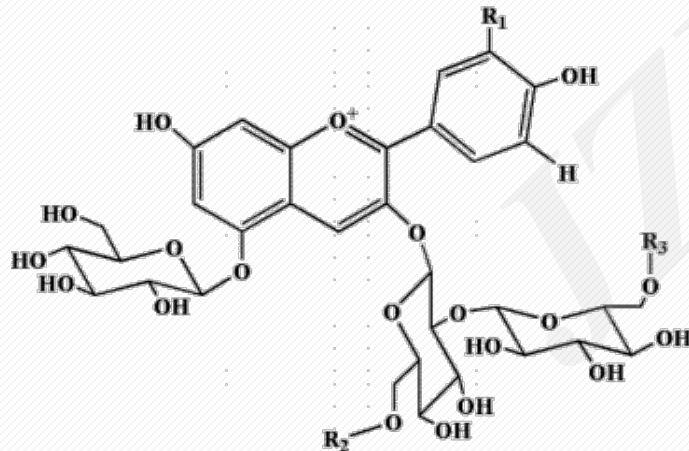
$R_1 = \text{OCH}_3/\text{OH}$

$R_2 = \text{H}/\text{OH}/\text{OCH}_3$

$R_3 = \text{glucoside}/\text{galactoside}/\text{xyloside}/\text{arabinoside}/$
 $\text{rutinoside}/\text{ambubioside}/\text{diglucoside}$

$R_4 = \text{H}/\text{glucoside}$

non-acylated
small molecule
anthocyanins



Purple sweet potato

$R_1 = \text{OCH}_3/\text{OH}$

$R_2 = \text{H}/\text{caffeoyl}/\text{feruloyl}/\text{coumaryl}/\text{p-hydroxybenzoyl}$

$R_3 = \text{H}/\text{caffeoyl}/\text{feruloyl}/\text{coumaryl}/\text{p-hydroxybenzoyl}$

acylated
macromolecular
anthocyanins

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

Experimental method

8 weeks

