紫色狼尾草萃取物及其活性成分預防肥胖之用途

提案人：潘敏雄 教授
單　位： 國立臺灣大學　食品科技研究所
簡　歷：(可列出相關連結，例如系所、研究室網頁)

- 研究室網頁：https://panmhlab1.wixsite.com/pan-mhlab
- 國立台灣大學食品科技研究所 特聘教授兼所長
- 研究專長:食品化學、保健與機能性食品、疾病化學預防

市場及需求:

根據世界衛生組織的資料指出，肥胖在這幾十年來一直保持著很高的盛行率，並引起許多代謝性疾病，例如二型糖尿病和非酒精性脂肪肝，造成嚴重的健康問題。除了血糖濃度異常外，肥胖以及其併發症（例如脂肪肝）都常伴隨著代謝症候群出現，更有研究指出有肥胖與胰島素抗性呈正相關，皆會造成發炎反應。長期的慢性發炎被認為是心血管疾病和一些慢性疾病如：癌症、阿茲海默症的重要指標，因此透過日常生活中攝取功能性食品以改善肥胖已經成為熱門的議題。

技術摘要(含成果):

本專利設計了動物實驗來探討狼尾草熱水萃取物的抗肥胖潛力，擬以高脂飲食誘導小鼠肥胖，探討介入狼尾草熱水萃取物後，能否透過減少氧化壓力及慢性發炎反應來延緩肥胖的症狀。最後，將會根據實驗結果開發成相關的功能性食品，並希望可以因此增加本地狼尾草的經濟價值。

優勢:

狼尾草 (*Pennisetum purpureum* Schumach) 是台灣本地的一種在地作物，常被用作動物飼料使用，而其中一個經培殖改良的狼尾草品種-台畜草五號，其富含花青素並具有發展成食品的潛力。在先前研究已經指出，在各種水果或蔬菜中的花青素具有改善代謝症候群、降低氧化壓力及抗發炎的能力，然而目前仍缺乏有關狼尾草改善肥胖效果的相關研究。

競爭產品:

預防或改善肥胖之相關天然物

專利現況:

(1) 本研究團隊具有數十年研究高脂飲食肥胖模式探討經驗

聯絡方式(請不用填):

臺大產學合作總中心
Tel: 02-3366-9945, E-mail: ordiac@ntu.edu.tw

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Use of purple Napiergrass (*Pennisetum purpureum* Schumach) extracts and its active ingredients for preventing obesity

PI： Prof. Pan, Min-Hsiung

Department of Food science and technology, National Taiwan U.

Experience:

Food Chemistry, Health and Functional Foods, Disease Chemoprevention

Market Needs:

According to WHO, obesity has a high prevalence in the last few decades. Due to the association with many metabolic disorders, such as type-2-diabetes and nonalcoholic fatty liver, obesity has become a serious health problem. Besides of dysglycemia, obesity and obesity-related conditions are very common with the diagnosis of metabolic syndrome, for instance, fatty liver, and a positive correlation between obesity and insulin resistance leads to a cycle of increasing inflammation. Long-term chronic inflammatory is considered as a key indicator of cardiovascular disease and chronic diseases like cancers and Alzheimer's disease.
Therefore, the intervention of functional compounds through daily food has gained its attention for obesity prevention.

Our Technology:

Therefore, an animal study is designed to investigate the anti-obesity capability of aqueous extract of Napiergrass. Taishigrass No. 5 on high-fat diet induced obesity in mice, possibly via reduction in oxidative stress and chronic inflammation. Finally, a related functional product will be developed and hopefully, the value of local-harvest Napiergrass can be increased.

Strength:

Napiergrass (*Pennisetum purpureum* Schumach.) is a local harvest crop in Taiwan that has been served as animal feeds for years. In Taiwan, a breeding species, Napiergrass. Taishigrass No. 5 has been introduced as a species rich in anthocyanins with increased suitability as a food ingredients. In previous studies, anthocyanins from various fruits or vegetables have been studied to improve metabolic syndromes, reduce oxidative stress and their anti-inflammation capability. However, the effect of Napiergrass. Taishigrass No. 5 extract on obesity hasn't been studied.

Competing Products:

The intervention of functional compounds through daily food has gained its attention for obesity prevention.

Intellectual Properties: Contact (do not need to fill out):

Center of Industry-Academia Collaboration, NTU
Tel: 02-3366-9945, E-mail: ordiac@ntu.edu.tw