In recent de and thous	cades, there h	nas been renew bl920ediocinahpl9	ed interest in t OctseNaMieBTé€3 :	raditional and a \$dr. <b>@4</b> n\area 1000de	alternative medio	cine iæ10 g0 G()]TJET(	<b>1</b> 8(e)9477

In high fat animal models of obesity and insulin resistance, we observed that sage extract exhibited similar effects to rosiglitazone. It improved insulin sensitivity *in vivo*, inhibited lipogenesis in mice adipocytes, and reduced plasma inflammatory markers (Ben Khedher *et al.*, 2018). Our recent data (not yet published), supports the utilisation of sage and chamomile extracts as potentially effective anti-inflammatory agents in subcutaneous adipocytes.

Our research proposal aims to investigate the potential anti-obesity and anti-diabetic effect of both extracts:

By the evaluation of their properties on the improvement of insulin sensitivity or the decrease of insulin resistance in subcutaneous and visceral human primary adipocytes.

By measuring their effect on lipogenesis (lipid storage or accumulation), and on lipolysis (lipid breakdown or free fatty acid and glycerol release) in both fat tissues.

Bucidate the underlying mechanisms involved in the biological activity of sage and chamomile on both glucose and lipid metabolism in both adipose tissue depots.

This project will open new opportunities for using both plants as alternative medicines in the treatment of metabolic diseases such as obesity and type 2 diabetes.

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