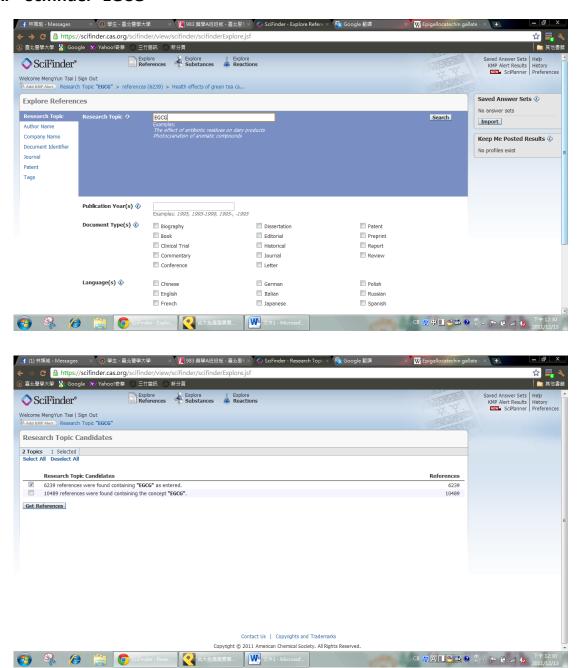
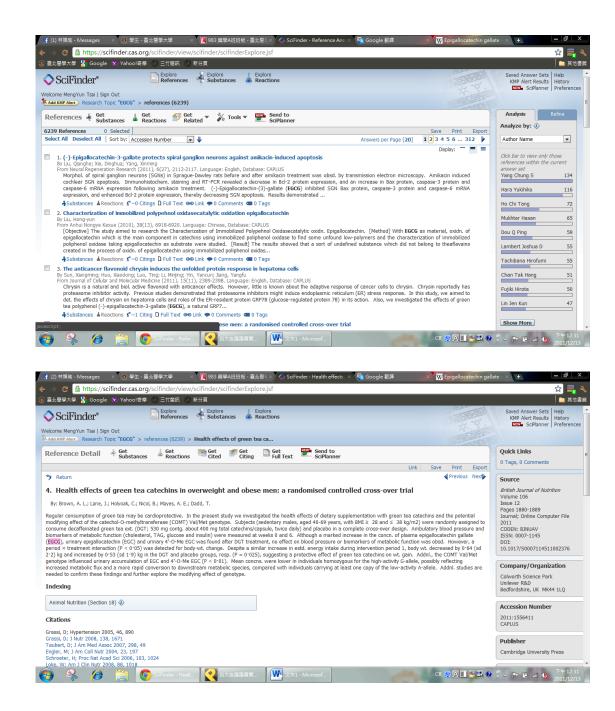
藥科二-藥化報告

藥三A B303098015 蔡孟芸

A. Scifinder-EGCG:





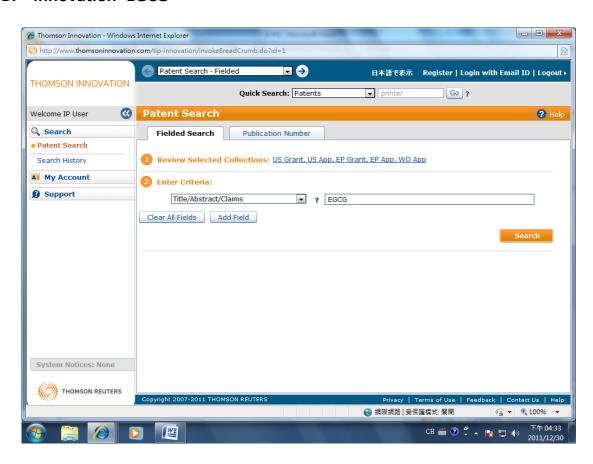
Health effects of green tea catechins in overweight and obese men: a randomised controlled cross-over trial

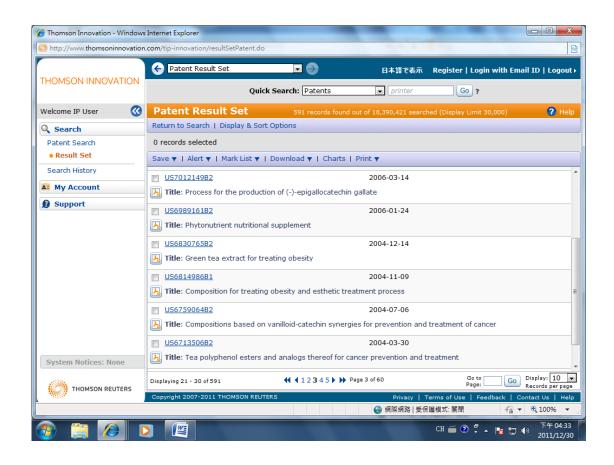
By: Brown, A. L.; Lane, J.; Holyoak, C.; Nicol, B.; Mayes, A. E.; Dadd, T.

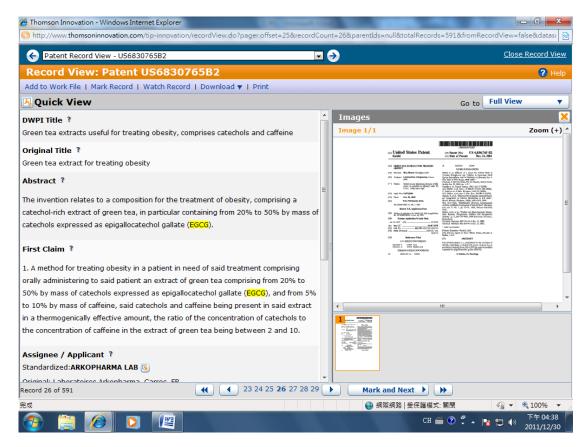
Regular consumption of green tea may be cardioprotective. In the present study we investigated the health effects of dietary supplementation with green tea catechins and the potential modifying effect of the catechol-O-methyltransferase (COMT) Val/Met genotype. Subjects (sedentary males, aged 40-69 years, with BMI ≥ 28 and ≤ 38 kg/m2) were randomly assigned to consume decaffeinated green tea ext. (DGT; 530 mg contg. about 400 mg total catechins/capsule, twice daily) and placebo

in a complete cross-over design. Ambulatory blood pressure and biomarkers of metabolic function (cholesterol, TAG, glucose and insulin) were measured at weeks 0 and 6. Although a marked increase in the concn. of plasma epigallocatechin gallate (EGCG), urinary epigallocatechin (EGC) and urinary 4'-O-Me EGC was found after DGT treatment, no effect on blood pressure or biomarkers of metabolic function was obsd. However, a period \times treatment interaction (P < 0.05) was detected for body-wt. change. Despite a similar increase in estd. energy intake during intervention period 1, body wt. decreased by 0.64 (sd 2.2) kg and increased by 0.53 (sd 1.9) kg in the DGT and placebo groups, resp. (P = 0.025), suggesting a protective effect of green tea catechins on wt. gain. Addnl., the COMT Val/Met genotype influenced urinary accumulation of EGC and 4'-O-Me EGC (P < 0.01). Mean concns. were lower in individuals homozygous for the high-activity G-allele, possibly reflecting increased metabolic flux and a more rapid conversion to downstream metabolic species, compared with individuals carrying at least one copy of the low-activity A-allele. Addnl. studies are needed to confirm these findings and further explore the modifying effect of genotype.

B. Innovation-EGCG:









DWPI Title:

Green tea extracts useful for treating obesity, comprises catechols and caffeine

Original Title:

Green tea extract for treating obesity

Abstract:

The invention relates to a composition for the treatment of obesity, comprising a catechol-rich extract of green tea, in particular containing from 20% to 50% by mass of catechols expressed as epigallocatechol gallate (EGCG).

First Claim:

1. A method for treating obesity in a patient in need of said treatment comprising orally administering to said patient an extract of green tea comprising from 20% to 50% by mass of catechols expressed as epigallocatechol gallate (EGCG), and from 5% to 10% by mass of caffeine, said catechols and caffeine being present in said extract in a thermogenically effective amount, the ratio of the concentration of catechols to the concentration of caffeine in the extract of green tea being between 2 and 10.

C. 學習心得:

這次我所做的主題是關於綠茶多酚 EGCG,在這之前對於兒茶素的了解, 我只知道其抗氧化功能很強,所以在抗癌及心血管疾病方面擔任了重要的角 色,因此藉由此次的課程,我決定多了解一些 EGGCG 的資訊。在這次的資 料搜尋中,我發現 EGCG 除了前面提到的功能,它亦可在減重中扮演重要的 角色,EGCG 可以抑制 FAS 脂肪酸合成酵素,間接阻撓脂肪體的聚集,因此 可以有減重的功能,除此之外,在 Innovation 專利搜索當中,也發現早在好 幾年前就有人發表關於用綠茶提取物治療肥胖的專利了,而這些資訊都讓我 對 EGCG 有更進一步的認識。 藉由這幾次的課程我才有機會接觸到 Scifinder 和 Innovation 這兩個系統,而我也這時才現這兩個系統對於搜索資訊是如此的好用,以前要找資料時,想找到比較學術性的文獻都不容易,但現在有了 Scifinder 就方便多了,除了搜索關鍵字之外,還可以用結構或其他方式去搜尋真的很方便,而找到的資料除了相關文獻外,也可以找到合成圖,這些都對我有很大幫助! 另外,Innovation 專利搜索平台也讓我眼睛為之一亮,之前對於專利的認識很淺,但透過這堂課我知道了申請專利的大概過程,而透過這個平台,我更可以知道我想搜尋的東西是否以前有人提過申請或是否有相關的文獻曾出現過,而且它的整合系統也讓我非常驚訝,它可以整合某個東西之前是引用了誰的專利而之後又被誰引用了,這些都讓我大開眼界,總而言之,這幾堂課程真的讓我獲益良多,而在知道如此好用的系統之後,我相信以後資料搜索一定可以更快速更方便,而在我的學習道路上一定也很有幫助。