



茶加工與多元產品開發

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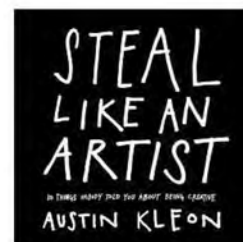
Universal health coverage: everyone, everywhere.

1

點子都是偷來的

You don't need to be a genius, you just need to be yourself.

creativity is everywhere, creativity is for everyone.



偷學的東西先收好

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2



我就是台灣茶



多元產品開發

新創

新品系
新加工方法
新泡飲方式

組合

有形與有形

1. 健康元素
A+B+....
2. 茶+包裝或其他

有形與無形

1. 茶+文創 or 歷史
2. 茶+環保 or 綠色
3. 茶+宗教



變形

定義改變
改變用途
創造新價值
新語彙
新習慣



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3



黃腦人 東方美人茶

適合當主管，經理人，思維細膩，邏輯清晰，是優秀的領導人，對於事情條理分明，事事處變不驚，適合喝味道高貴優雅，有層次變化又有果香的的東方美人茶，東方美人茶湯散發出琥珀般高貴又神秘的顏色，正好襯托出您的身份地位。

主要區域：桃園、新竹、苗栗



藍腦人 文山包種茶

藍腦人是充滿創意的人，活在自己的世界裡，適合當音樂家，文學家，哲學家，思想家，藝術家，寫文章寫到一半時來一杯的味道清新，底韻深厚的文山包種茶，充份體現出您文青的氣質。

主要區域：新北市、坪林



綠腦人 日月潭紅茶

綠腦人做事使命必達，細心仔細，有章法，循規蹈矩，適合當建築師，律師，數學家。紅茶味道始終如一，味道香濃，提神，去疲勞，有解熱效果，茶種平易近人，但裡面藏有高貴的蜜香味，表現出綠腦人恭謙平實但內在博大精深的特質。

主要區域：日月潭周邊



橘腦人 台式烏龍茶

橘腦人古道熱腸，性情中人，追求自己有熱忱的事情做，充滿了正義感與俠義之心，隨時鼓勵與保護身邊的人，最適合喝可以一泡再泡，味道濃厚，茶氣持久，除燥去火的台式烏龍茶。

主要區域：南投、嘉義

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4

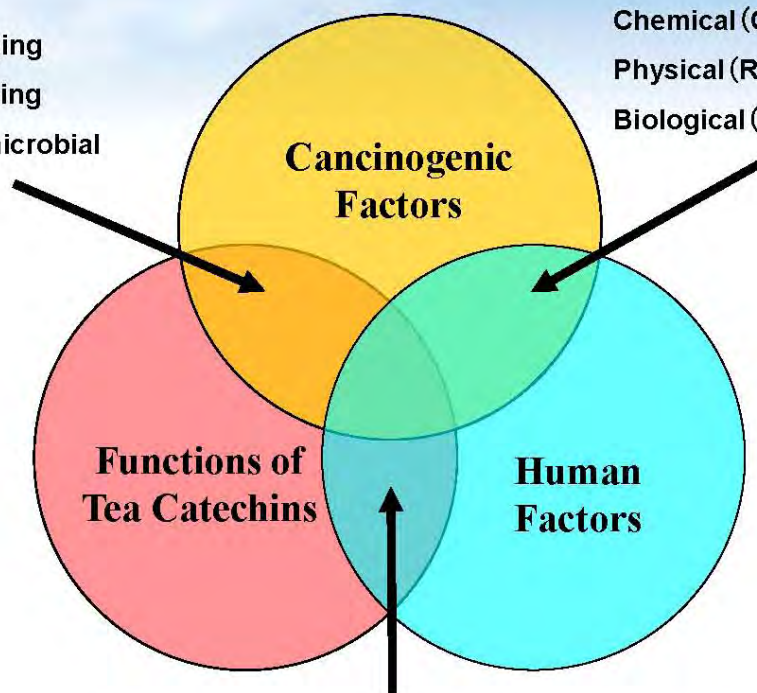
你要思考的問題(5W3H)

- ◆What 產品規格
- ◆Why 產品特色
- ◆Who 消費對象
- ◆Where 通路
- ◆When 期限
- ◆How to do 生產代工
- ◆How much 成本
- ◆How many 生產量或人員支援

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5

Anti-Oxidative
Radical Scavenging
Enzyme Modulating
Anti-viral, Anti-microbial

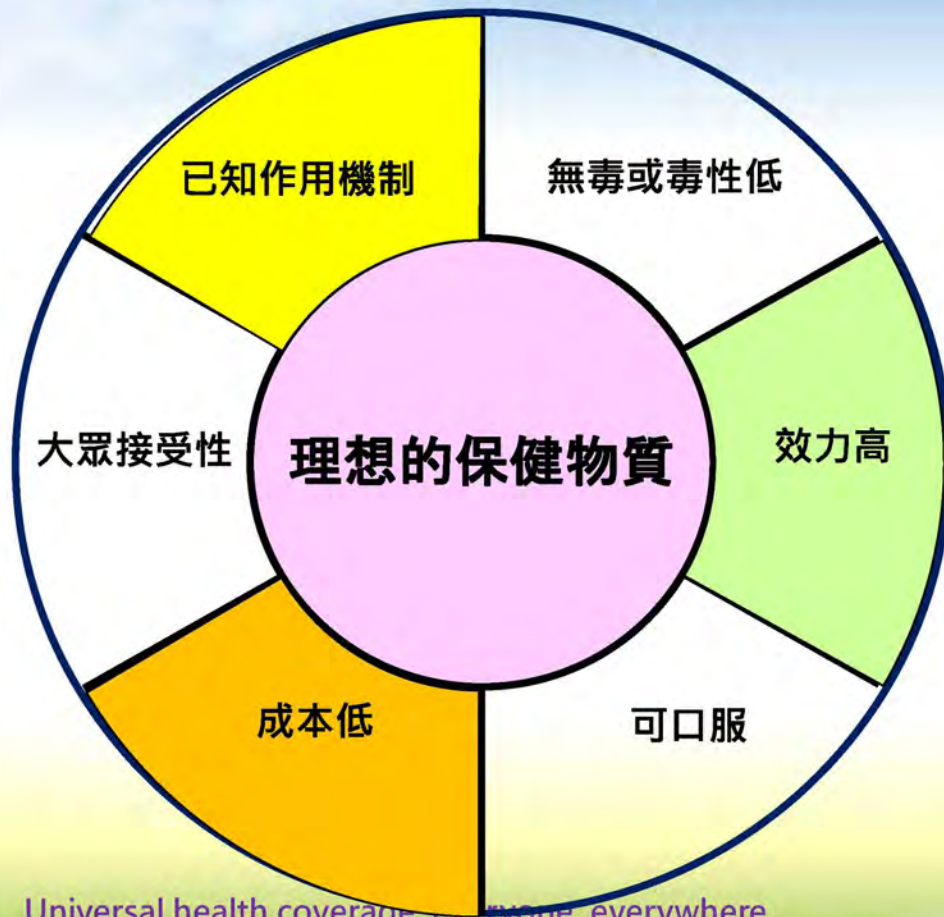


Chemical (Carcinogens)
Physical (Radiations)
Biological (Bacteria, Mold, Virus)

Method of Administration (Oral, Topical, Injection)
Absorption, Metabolism, Distribution, Excretion

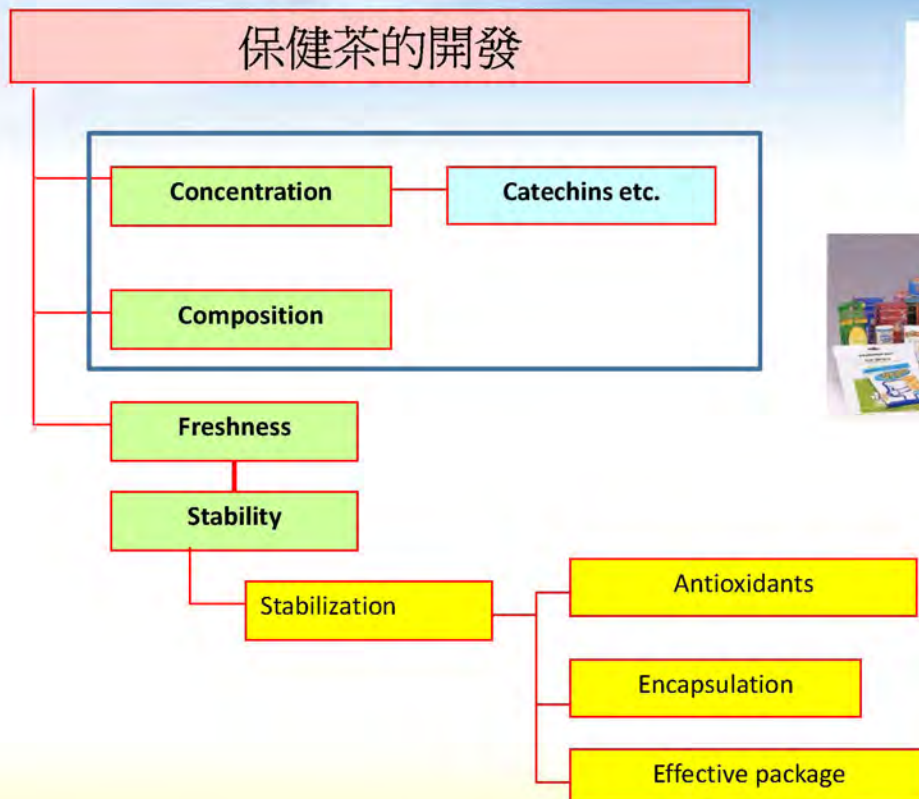
Concept of Chemoprevention by Tea

茶的保健資源上的意義



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7



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8



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Food Chemistry 98 (2006) 483–489

Food
Chemistry

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Heavy fermentation impacts NO-suppressing activity of tea in LPS-activated RAW 264.7 macrophages

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Department of Food Science, Yuanpei University of Science and Technology, No. 306, Yuanpei Street, Hsinchu, Taiwan 300, ROC

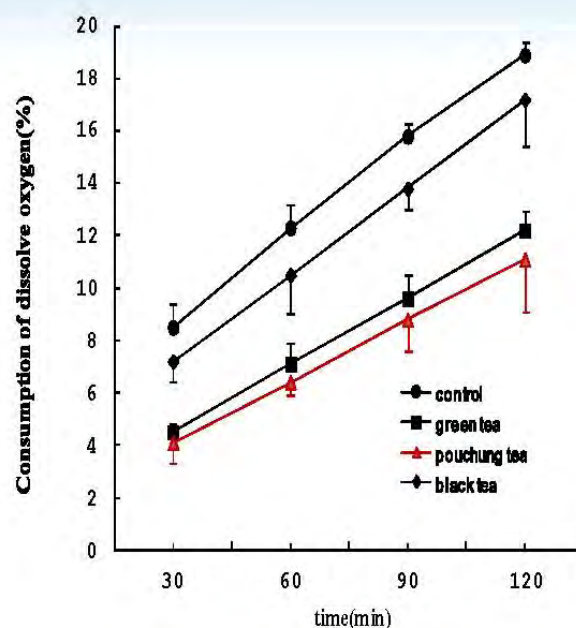
Received 13 December 2004; received in revised form 17 May 2005; accepted 17 May 2005

Abstract

The effect of fermentation on the nitric oxide (NO)-suppressing activity of tea was investigated using an lipopolysaccharide (LPS)-activated RAW 264.7 cell model. Two species of tea, Taiwan tea No. 12 and Chinsin Oolong, commonly cultivated and consumed in Taiwan, were selected and manufactured with three degrees of fermentation. All of the teas including non-fermented green, partially fermented pouchong and fully fermented black teas, were prepared from a single batch of fresh tea leaves. Additionally, the freeze-dried solids of tea infusions were used to treat cells and their NO-suppressing activities were compared. The results showed that the two species of black tea inhibited the NO production, inducible nitric oxide synthase (iNOS) catalytic activity and iNOS protein expression in LPS-activated cells, more weakly than did green and pouchong teas. Meanwhile, the NO-suppressing activity was highly correlated with the total phenolics content. Clearly, heavy fermentation strongly affects the NO-suppressing activity of tea, and the decline of the NO-suppressing activity is attributed to the elimination of the phenolics.

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Keywords: Fermentation; Nitric oxide; Antioxidant; Phenolics; Tea



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9

烏龍茶對高強度訓練運動員的保健效果

JFS S: Sensory and Nutritive Qualities of Food

Vol. 70, Nr. 9, 2005—JOURNAL OF FOOD SCIENCE 5581
Published on Web 11/16/2005

Effects of Oolong Tea Supplementation on Lipid Peroxidation of Athletes at Rest and Post-exhaustive Exercise

PU-HSI TSAI, NEAN-BEEN KAN, SU-CHEN HO, CHIEH-CHUNG LIU, AND CHIH-CHENG LIN

ABSTRACT: Oolong tea contains polyphenolic catechins that can act as antioxidants and improve blood lipid status. The purpose of this study was to investigate the effect of a daily intake of Oolong tea for 30 d on the cholesterol profiles, lipid peroxidation level, and superoxide dismutase activity in athletes before and after exhaustive exercise. Twenty-two male rugby players served as the experiment subjects. They were divided into 2 groups: the tea-supplement group and control group. The results showed that there was a significant increase in total plasma cholesterol for both groups after training. There were no significant differences in the high-density lipoprotein (HDL) cholesterol level and low-density lipoprotein (LDL) cholesterol level after tea supplementation. However, ingestion of Oolong tea resulted in significantly lower resting and post-exhaustive exercise level of plasma malondialdehyde, and significantly lower resting level of superoxide dismutase activity. The results suggest that supplementation with Oolong tea for rugby players can decrease oxidative stress, and this can be explained by the decrease of lipid peroxidation level in cooperation with Oolong tea supplementation against the free radicals.

Keywords: catechins, exhaustive exercise, lipid peroxidation, Oolong tea, oxidative stress

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10

Inhibitory Effect and Mechanisms of an Anthocyanins- and Anthocyanidins-Rich Extract from Purple-Shoot Tea on Colorectal Carcinoma Cell Proliferation

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ABSTRACT: One newly bred variety of tea, called purple-shoot tea, was selected to evaluate its antiproliferative effects on colorectal carcinoma cells, as well as normal colon cells. The phytochemicals and identified catechins of purple-shoot tea extract (PTE) were significantly higher than that of ordinary tea, especially the anthocyanins (supplied by 135.644) and anthocyanidins (supplied by 3.5-fd4). PTE inhibited the proliferation of COLO 320DM ($IC_{50} = 64.9 \mu\text{g/mL}$) and HT-29 ($IC_{50} = 54.2 \mu\text{g/mL}$) by blocking cell cycle progression during the G₀/G₁ phase and inducing apoptotic death. Western blotting indicated that PTE induced cell cycle arrest by reducing the expression of cyclin E and cyclin D1 in COLO 320DM and the upregulation of p21 and p27 cyclin-dependent kinase inhibitors in HT-29. Two cells treated with PTE also indicated the cleavage of PARP, activation of caspase 3, and an increased Bax/Bcl-2 ratio. Our results showed that PTE is a potential novel dietary agent for colorectal cancer chemoprevention.

KEYWORDS: apoptosis; cell cycle; colorectal carcinoma; purple-shoot tea

紫芽茶抗腸癌作用

Journal of the Science of Food and Agriculture

J. Sci. Food Agric. 85:1119–1124 (2005)
DOI: 10.1002/jsfa.2077

Retardation of lipid oxidation in blue sprat by hot water tea extracts

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Abstract: The blue sprat is a small fish belonging to the family Cheilidae. Deterioration of its freshness after catching is so rapid that the fish is cooked in simple ways and consumed locally. The prooxidant activity of the skin, dark meat and ordinary meat was much higher than that of other fishes such as jack mackerel. Suppression of lipid peroxidation in blue sprat was attempted using hot-water extracts of five types of Taiwanese tea with different degrees of fermentation, in Longjing-type green tea, Shih Jih Chuan oolong tea, Tungting oolong tea, Pouchong tea and black tea. All the tea extracts showed antioxidant activity on oxidation of linoleic acid induced by the extracts of blue sprat's tissues. The antioxidant activity of each tea extract showed a positive correlation with the contents of total catechins, especially with that of epigallocatechin gallate, but a poor correlation with the contents of total polyphenols. The Tungting oolong tea together with Chinese green tea effectively suppressed the prooxidant activities of the dark meat and skin of blue sprat. Impregnation of blue sprat in the extract of the Tungting oolong tea retarded the lipid oxidation in fish meat assessed by peroxide value and carbonyl value during refrigeration.

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烏龍茶用於魚肉抗氧化

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Anti-Proliferation and Radiation-Sensitizing Effect of an Anthocyanidin-Rich Extract from Purple-Shoot Tea on Colon Cancer Cells

CHIH-CHENG LIN^{1*}, CHIH-PING HSU², CHIA-CHIEH CHEN³, TSE-ZUNG LIAO⁴, CHUI-FENG CHIU⁴, LESTER P.J. LIEN⁵ AND YI-TING SHIH¹¹Department of Biotechnology, Yuanpei University, Hsinchu, Taiwan, R.O.C.²Department of Medical Technology, Yuanpei University, Hsinchu, Taiwan, R.O.C.³Institute of Nuclear Energy Research, Taoyuan, Taiwan, R.O.C.⁴Tea Research and Extension Station, Taoyuan, Taiwan, R.O.C.⁵Energy and Agile System Department, Metal Industrial Research & Development Centre, Keelung, Taiwan, R.O.C.

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Food Control 16 (2005) 169–175

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Enhancement of the storage quality of frozen bonito fillets by glazing with tea extracts

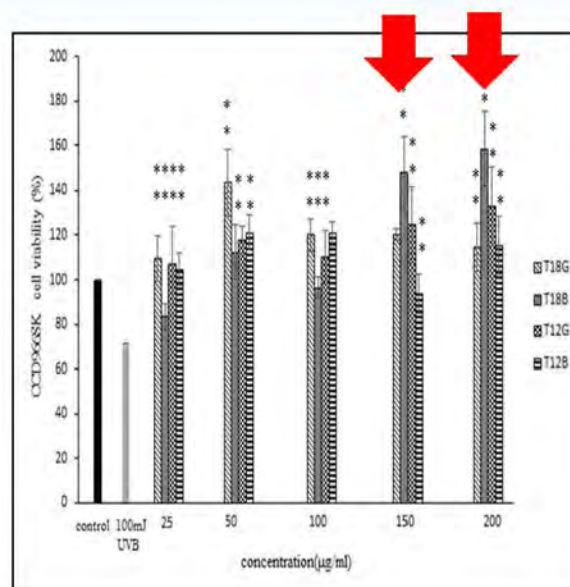
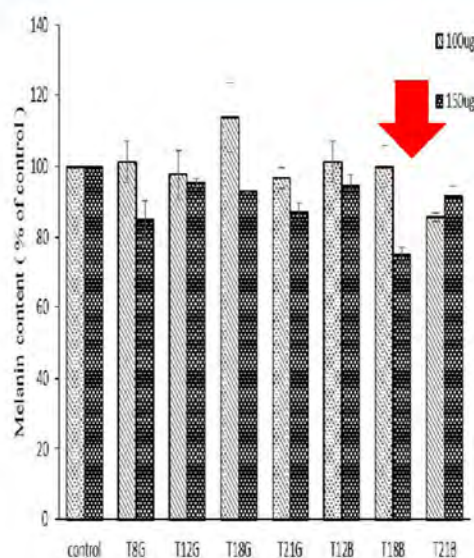
Chih-Cheng Lin^{a,*}, Chung-Saint Lin^b^aDepartment of Food Science, Yuanpei University of Science and Technology, No. 306, Yuanpei Street, Hsinchu, Taiwan^bDepartment of Food and Beverage Management, Yuanpei University of Science and Technology, No. 306, Yuanpei Street, Hsinchu, Taiwan

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副茶作為包冰液的保鮮效果

抑制黑色素瘤細胞(B16-F10)生成黑色素能力

茶萃取物對人類纖維母細胞抗UVB 能力

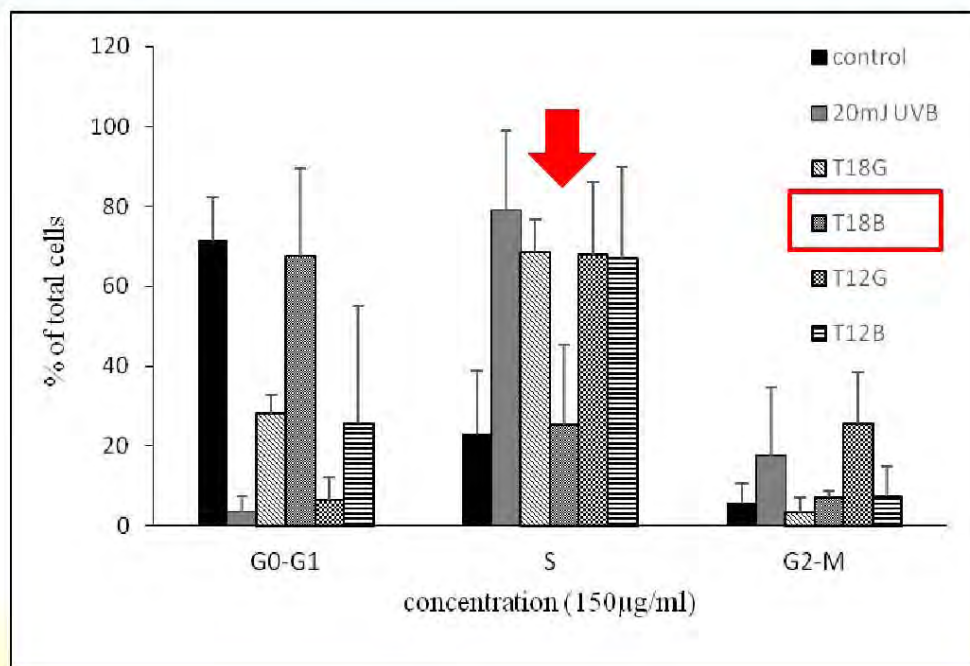


T18B

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12

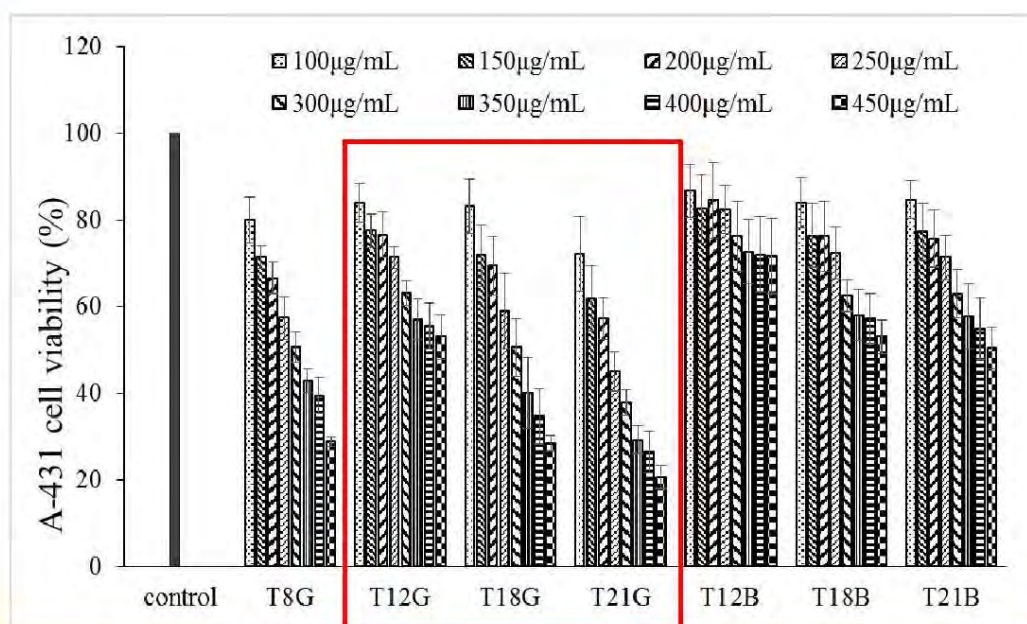
茶萃取物對人類角質細胞抗UVB能力之細胞週期影響



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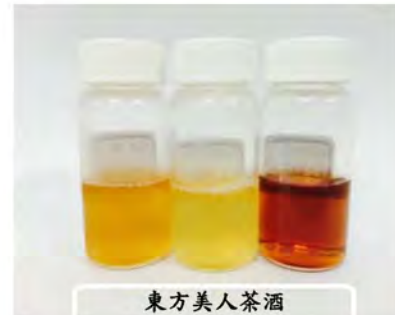
13

不同茶樣品對人類表皮癌細胞細胞(A431)的抑制活性



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14



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15

開發中產品

- ◆ GABA茶(腸癌、抗菌、降壓)
- ◆ 杭菊護眼產品
- ◆ 紫芽茶抑制代謝症候群
- ◆ 柚柑茶抗發炎作用
- ◆ 高齡口腔保健茶錠
- ◆ 明目果寡糖



Body Odor Spray



Pet Foods



Suzuki Catechin-Filtered Car



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16

討論題綱

- 一、新型茶葉加工技術之開發
- 二、以文創產業帶動茶多元產品之發展
- 三、茶食文化之多元開發利用