

<p>主講人</p>	<p>蔡淑瑤</p>	
<p>講題 (Topic)</p>	<p>Vitamin D₂ content and antioxidant properties of fruit body and mycelia of edible mushrooms by UV-B irradiation</p>	
<p>演講摘要 (Abstract)</p>	<p>Our objective was to study the effect of ultraviolet-B (UV-B) light irradiation on the vitamin D₂ content of several edible fruit bodies and mycelia and their antioxidant properties. Eleven species of fresh mushroom fruiting bodies, including species from each of the six genera, <i>Agaricus</i>, <i>Agrocybe</i>, <i>Auricularia</i>, <i>Hypsizigus</i>, <i>Lentinula</i> and <i>Pholiota</i>, and five species from <i>Pleurotus</i> genus, were irradiated with UV-B light for 2 h. For three species of mushroom fruiting bodies with excellent vitamin D₂ yield, their mycelia were obtained by liquid culture, and subjected to the same time as the UV-B irradiation. Vitamin D₂ content of irradiated fruit bodies significantly increased from 0–3.93 to 15.06–208.65 mg/g, of which the amount in golden oyster mushroom increased by a maximum of 204.7 mg/g. Vitamin D₂ content in irradiated mycelia of golden oyster, oyster and pink oyster mushrooms increased from 0.28–5.93 to 66.03–81.71 mg/g, respectively. The three irradiated mycelium polysaccharide contents decreased in a range from 1.3% to 24.6%. Overall, EC₅₀ values of non-irradiated and irradiated fruiting bodies and mycelia were 0.92–4.94, 0.20–6.90 and 0.02–0.84 mg/mL for reducing power, scavenging ability and chelating ability, respectively. Although UV-B irradiation influenced the content of ergothioneine, flavonoids and total phenols, these irradiated samples still contained a sufficient amount of these antioxidant components</p>	
<p>主講人 簡介 (Biography)</p>	<ul style="list-style-type: none"> ➤ 專任 ● 亞洲大學保健營養生技學系 教授 2015/7-迄今 ➤ 經歷 ● 食品檢驗分析職類乙、丙級術科測試監評委員 2006/08-迄今 ● 臺中市國民中小學科學展覽會評審委員 2013/05-迄今 ● 中國醫藥大學附設醫院 醫學研究部顧問 2014/08-2016/07 ● 臺中市政府衛生局膠囊錠狀食品業者稽核及輔導計畫稽核委員 2013/06-2013/11 ● 丸文調理食品有限公司輔導老師 2013/01-2014/02 ● 臺中市政府衛生局餐飲業 HACCP 衛生評鑑稽核委員 2010/08-2010/10 ● 教育部專科學校畢業程度自學進修學力鑑定考試考科召集人兼命題委員 2008/08-2013/07 	