

# 中山醫學大學 100 學年度碩士班入學招生考試試題

## 營養學系碩士班

考試科目：食品學、膳療及生命期營養學

時間：80 分鐘

※請注意本試題共（2）張，如發現頁數不足，應當場請求補齊，否則缺頁部份概以零分計算。 第（1）頁

本試題共五大題，總分 100 分。

### 一、解釋名詞 (20%)

1. Hepatosteatorsis
2. Metastasis
3. Apoptosis
4. Adipokines
5. Trans fats

二、生活型態與飲食習慣的改變，使得肥胖問題成為全球關注的議題之一，World Health Organization 在 1996 年正式將肥胖列為一種慢性疾病，請回答以下關於肥胖的問題：

1. 如何測量肥胖的程度? (6%)
2. 肥胖相關的疾病有那些? 形成原因為何? (7%)
3. 如何改善肥胖的問題? (7%)

三、請回答以下有關健康食品認證的問題：

1. 請比較國內對食品、保健食品、健康食品與藥品之認定有何差異? (5%)
2. 目前衛生署已認可之健康食品功效評估方法有那些? (5%)
3. 何謂健康食品雙軌查驗登記制度? (5%)
4. 請你分析國內還可新增那些健康食品功效評估方法? 原因為何? (5%)

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四、請回答以下有關蔬菜色素的問題：

1. 請依色素種類舉例蔬菜含有那些色素成分? (7%)
2. 色素成分在不同加工條件下有何變化? (7%)
3. 蔬菜色素成分對營養保健有何貢獻? (6%)

五、以下為 2011 年 1 月份 Ringseis 與 Eder 發表於 Molecular Nutrition & Food Research 期刊的摘要，請將內容翻譯為中文 (20%)

Although oxidized fats are widely considered to have detrimental effects on human health, a large number of feeding studies with experimental animals have consistently demonstrated that oxidized fats, compared with fresh fats, cause a reduction in the concentrations of triacylglycerols and cholesterol in liver and plasma. The reason for these effects became clear when recently it was shown that thermo-oxidized fats contain characteristic substances such as hydroxylated fatty acids and cyclic fatty acid monomers which are potent ligands and activators of peroxisome proliferator-activated receptor  $\alpha$  - a transcription factor controlling genes involved in fatty acid and lipoprotein metabolism. In addition, oxidized fats have also been reported to inhibit expression of genes involved in fatty acid synthesis and cholesterol homeostasis. These effects are mediated by inhibiting the maturation of sterol regulatory element binding proteins, which are transcription factors regulating genes involved in fatty acid synthesis and cholesterol homeostasis.