

**國立嘉義大學九十五學年度
食品科學系碩士班招生考試試題**

科目：專業英文

一、Translate the following terms into Chinese: (20%, 2% each)

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| 1. water sorption isotherm | 2. hurdle technology | 3. enriched rice |
| 4. individual quick freezing | 5. climacteric fruit | 6. biocatalyst |
| 7. secondary metabolite | 8. saponification value | 9. carcinogen |
| 10. hydrophilic lipophilic balance | | |

二、Translate the following terms into English: (30%, 2% each)

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| 1. 滲透壓 | 2. 紅外線光譜 | 3. 支鏈澱粉 |
| 4. 擠壓機 | 5. 三酸甘油酯 | 6. 超臨界流體萃取 |
| 7. 卵磷脂 | 8. 革蘭氏染色 | 9. 薄層層析法 |
| 10. 抗生素 | 11. 乳糖不耐症 | 12. 突變作用 |
| 13. 花青素 | 14. 半致死劑量 | 15. 醬油 |

三、Translation from English to Chinese: (30%, 10% each)

1. In the past, carbohydrates were classified as simple or complex based on the number of simple sugars in the molecule. Carbohydrates composed of one or two simple sugars like fructose or sucrose were labeled simple, while starchy foods were labeled complex because starch is composed of long chains of the simple sugar, glucose. Advice to eat less simple and more complex carbohydrates was based on the assumption that consuming starchy foods would lead to smaller increases in blood glucose than sugary foods.
2. In general, HPLC columns are stable within a pH range of 2 to 8. If you are measuring a pH value, the measurement must be done in the aqueous media before mixing the eluent with organic solvents. Modern HPLC columns can be used outside that pH range. The new bonding chemistries allow use down to pH 1 for some stationary phases. However, please check vendor's product information before using silica based column outside the pH range of 2 to 8. However, best lifetimes are obtained between pH 2.0 and pH 6.8.
3. Research suggests that up to 35 percent of cancers are related to poor diet. We can help lower our risk of developing several different types of cancer by eating healthy, well-balanced meals and maintaining a healthy weight. Fruits and vegetables can help us lower our risk for not only cancer, but for heart disease, diabetes and other chronic illness. After age 40, women need to increase their calcium intake to help prevent bone loss and osteoporosis. Increase calcium intake to 1,200 mg daily. If we take calcium supplements, be sure it also has Vitamin D to help our body absorb calcium.

四、Composition: (20 %, at least 200 words)

Topic: My experience to visit a food company