

科目：食品加工

系所組：食品科學研究所

1. Both degumming and alkali refining have to be used during processing of soybean oil. Please describe the principle and procedure for each. (10%)
2. What is instant milk powder? Also explain how raw milk can be processed into instant milk powder. (10%)
3. What is artificial tenderizing of meat? Also describe four methods which can be used to tenderize meat. (10%)
4. What is the difference between chocolate and imitation chocolate? Also explain how cocoa butter can be processed into chocolate. (12%)
5. What is selective hydrogenation? Please use linoleic acid as an example to explain. (8%)
6. Describe the purpose of each operation used in following foods: (18%)
 - (a) tuna can ↔ exhausting
 - (b) milk powder ↔ agglomeration
 - (c) frozen shrimp ↔ glazing
 - (d) minced pork ball ↔ kneading
 - (e) cream of corn soup ↔ rotational sterilization
 - (f) beef steak ↔ aging
7. Define the following terms and describe their applications in food industry. (20%)
 - (a) supercritical fluid extraction
 - (b) high pressure processing
 - (c) aseptic processing
 - (d) encapsulation
 - (e) retort pouch
8. How spray drying and freeze drying can be used for grape juice powder production? Also describe the principle and construction of these two methods. (12%)

※ 注意：1. 考生須在「彌封答案卷」上作答。

2. 本試題紙空白部份可當稿紙使用。

3. 考生於作答時可否使用計算機、法典、字典或其他資料或工具，以簡章之規定為準。