Kingdom of Saudi Arabia Ministry of Higher Education Umm Al-Qura University Faculty of Applied Medical Sciences Department of Clinical Nutrition



المملكة العربية السعودية وزارة التعليم العالي جامعة أم القرى كلية العلوم الطبية التطبيقية قسم التغذية الاكلينيكية

Clinical Nutrition Internship Booklet

Intern Name	
University ID	
Training Year	
Training Hospital	

Preface

Clinical Nutrition internship is an integral part of the Clinical Nutrition program and is designed to provide students with an opportunity to integrate and apply previously acquired knowledge and technical skills in actual clinical settings.

This internship booklet is prepared with the intention to provide orientation to interns about various tasks to be performed and/or observed in different disciplines during one-year internship at the hospitals. The ultimate goal is that intern may acquire necessary practical skills in performing various clinical nutrition tasks in different disciplines and hospital sections which in turn will help to improve health care services.

The beginning of the booklet entails the description of Clinical Nutrition program stating its vision, mission, goals and objectives. Following this, rules and regulations of internship are stated which each intern has to follow in addition to the instructions issued by the training site.

The main contents of this booklet are the tasks list given in various hospital wards in internship portfolio which interns are expected to either perform or observe during the training.

It is essential to evaluate intern's professional behavior and technical competencies that are expected to achieve on completion of her internship. The later part of the booklet contains samples of various forms (Forms #1 to Form #5) including supervisor evaluation form and intern feedback form.

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INTERN INFORMATION

	Arabic:
Name	English:
University ID	
National ID	
Mobile	
In case of emergency	Mobile no.:
	Relation:
E-mail	
Address	

Clinical Nutrition Program

1. Vision, Mission, Goals, Objectives and Values of the Program

1.1. Vision:

The clinical nutrition program is to be one of the leading programs at the national and regional levels recognizing our graduates for their professional competence, leadership quality, and competitive research.

1.2. Mission:

The mission of clinical nutrition program at Umm Al-Qura University is to provide innovative curricula responsive to the needs of the profession that result in clinical nutrition professionals able to immediately join the health care field with the theoretical knowledge and technical skills. Moreover, our graduates will be prepared to be able to adapt to future changes in the health care system and clinical nutrition science as well as the changing needs of the growing diverse society in Holy Makkah.

1.3. Goals:

- To obtain national and international academic accreditation.
- To prepare competent nutrition specialists who have acquired necessary knowledge, skills, training and proficiency in clinical nutrition.

1.4. Objectives:

Upon completion of clinical nutrition program our graduates are expected to:

- 1. Have in-depth knowledge of the relationships between nutrition data and pathologic processes, and how nutrition data relate to health and disease.
- 2. Have the talent to design, evaluate and implement new methods or protocols in different cases.
- 3. Have the ability to work independently and as a team member to perform critical thinking and problem solving skills in different domains.
- 4. Have the capability to demonstrate an attitude of

professionalism when working with colleagues and other health professional staff of the hospital.

1.5. Values:

Clinical Nutrition Program observes following values:

- 1. Observance of Islamic values
- 2. Professional commitment and ethics
- 3. Respect and appreciation of differences
- 4. Appreciation of social responsibilities
- 5. Life-long learning
- 6. Excellence in all areas, particularly in teaching, training and research
- 7. Transparency

2.Program Description:

Faculty of Applied Medical Sciences, Umm Al-Qura University offers the program leading to Bachelor degree (B.Sc.) in Clinical Nutrition. The program provides students a strong foundation in theory, training in clinical nutrition, research and managements domains.

The program comprises of eight semesters plus one-year internship (hospital based training) in clinical nutrition, after which the degree of B.Sc. in clinical nutrition is awarded to successful candidates. A student undertaking this program must complete a total of 132 credit units which are distributed as 20 credit units' university requirements, 29 college requirements and 83 credit units' program requirements.

2.1. The language of teaching: English.

- **2.2.** In addition, students are expected to develop certain academic skills such as essay and report writing, presentation skills and statistical analysis. These essential skills will allow the student to complete two important components of the program:
- **2.2.1. The Research Project:** This 3 credit units' course is offered in 7th semester and completing by the end of 8th semester. The students are provided with a list of projects proposals to choose from after agreement with supervisors in the department. It is expected that the students will apply knowledge and skills learnt during this course such as research methodology, data analysis and interpretation and presentation of research results during the experimental work of their research project.

At the end of the course students need to submit a thesis and give a seminar on their project and defend their work in discussion.

2.2.2. The Internship: This one full year (summer, first and second semesters) professional training is offered to each internee in three different general or specialized government hospitals. During this year, interns undergo in-depth training in all the wards of the hospital.

The supervision of interns is done at two levels; one by the hospital training coordinator and other by the program internship coordinator who reports to Vice Dean for Hospital Affairs. During training at the hospital, intern is supervised on daily basis by the supervisor for particular rotation. The internship monitoring team of the program visits training sites regularly (at least once in each four-months training rotation) and meet the interns and their supervisors to discuss their progress and addresses issues, if any.

INTERNSHIP SPECIFICS

Introduction:

Internship is an integral part of clinical nutrition program and is designed to provide interns with an opportunity to integrate and apply previously acquired knowledge and technical skills in actual clinical settings. Under the guidance of experienced clinical nutrition professionals, dieticians and other qualified personnel and health professionals, interns learn more about nutrition care process, food services including food management, food hygiene, food safety and evaluation of dietary orders. Interns will also be trained in developing dietary plan for patients with specific diseases, calculation of dietary requirements for patients and will be able to make nutritional diagnosis. They also gain an understanding of the roles and functions of the clinical nutritionists and dietician.

The internship provides applied learning experiences during which the intern should:

- 1. Practice and acquire skills as of clinical nutritionist and dietician
- 2. Practice skills in nutritional diagnosis
- 3. Correlate various physical and laboratory parameters with nutritional diagnosis
- 4. Calculate nutrients requirements
- 5. Develop food plan for patients with specific diseases
- 6. Understand the responsibilities, roles, and functions of clinical nutritionists

The internship program is conducted in the affiliated hospitals or primary health care facilities of the program, where interns learn by participating in the workload of a supervising nutritionist/ dietician /specialist/consultant. Emphasis in each internship discipline is given on: a) organization of work, b) use of standard dietary methods, c) correlation of physical and laboratory parameters for patient's nutritional requirements, and d) the establishment and use of programs for quality control and preventive maintenance for food services and its safety.

I. <u>Internship eligibility criteria</u>:

Entry in internship is allowed only after successful completion of all courses of clinical nutrition program specified.

II. <u>Internship duration</u>:

The training period for the internship is one calendar year. It is offered in 5th academic year of the program and begins two weeks after the final examination of 4th academic year.

III. Internship disciplines:

The internship program is spread over one year during which each intern takes training in various disciplines of clinical nutrition, e.g., nutrition care process, dietary planning, nutritional requirements, nutritional diagnosis and intervention, food services as well as food hygiene and safety. Interns are rotated in all the departments of the hospital. The schedule of training is given in the forthcoming section.

Each intern needs to complete internship portfolio during the whole training period. In addition, they need to maintain a logbook for nutrition care process for various patients for each rotation, and another logbook deals with food services once a year.

IV. Internship rotations:

Rotations in the internship year depend on the program needs. In clinical nutrition program, each intern has three rotations of 4 months each in three hospitals and/or primary health care facilities and trained in different wards, clinics and food services areas.

V. Interns' responsibilities:

Each intern should have two booklets; a) internship policy and general regulations booklet, and b) program specific internship booklet that contains the tasks for each discipline. Each intern must go through both booklets thoroughly.

Internship policy and general regulations booklet has the details of general policy and rules and regulations of internship including vacations that all interns have to follow.

In program specific booklet each intern must use the internship portfolio on daily basis and complete it at the end of each rotation. Intern is advised to seek help of immediate supervisor in filling and completing the portfolio. Internship monitoring team will review and assess the portfolio on their periodic visits to training sites and will assign the marks.

During internship period, interns have to demonstrate following responsibilities:

- 1. All interns should produce required vaccination document.
- 2. All interns should provide Basic Life Support (BLS) certification at the beginning of internship. The guidance for obtaining BLS certification will be provided by the office of the Vice Dean for Hospital Affairs.
- 3. Perform training in accordance with the policies and procedures of the nutrition department of the training site.
- 4. All interns should comply with dress code specified by the training site.
- 5. Interns usually spend at least 8 hours daily, 5 days/week or follow the working hours of clinical site where she is being trained.
- 6. Interns must refrain from unsafe and unprofessional conduct.
- 7. Show professional behavior as clinical nutrition professionals.
- 8. Perform assigned work with responsibility.
- 9. Adhere to hospital rules and regulations.
- 10. Attempt to establish good working relationships with all personnel with whom they come in contact during the internship rotation.

VI. <u>Internship supervision and monitoring:</u>

The supervision of interns is done at two levels; one by the hospital training coordinator and other by the program internship coordinator designated by the faculty for this purpose and report to Vice Dean for Hospital Affairs. During training at hospital, intern is supervised on daily basis by the supervisor for particular rotation.

Clinical nutrition program has three training rotations (4 months each) during the internship period of one year. The internship monitoring team visits regularly at least once during each rotation to training sites and meet the interns and their supervisors to discuss their progress and addresses issues, if any. However, urgent issues can be reported to internship coordinator whenever is required. The monitoring team submits the report of each visit to program internship coordinator using a prescribed form **(Form #5)**.

A staff member of clinical nutrition department from the university is assigned a group of interns which he/she follow and also encourage the hospital staff to help interns to complete all paper work and feedbacks. The hospital staff and interns should be aware of the visit date and time. The visits will be for whole day for interns in the same hospital at random timing during the four months' intervals of training in specific hospitals.

VII. <u>Interns' Evaluation</u>:

a. Evaluation of interns by hospital and faculty supervisors:

Professional behavior and technical performance are evaluated using an evaluation form designed to reflect interns' competencies that are expected to achieve on completion of their internship in clinical nutrition. Evaluation by hospital supervisors has 80% weightage. This evaluation is organized into three domains:

- (1) General clinical competencies i.e., affective behavior, attitude, initiative and motivation while at the rotation site;
- (2) Discipline competencies i.e., ability to demonstrate basic theoretical and practical and technical ability in performing various clinical nutrition procedures; and
- (3) Assessment of activities that are in the normal course of daily routine and that intern would normally attend or participate in seminars/lectures, in-service workshops, and their presentations. All three domains are rated on percent competency.

At the end of each rotation intern will be evaluated by his/her immediate supervisor using an evaluation form (Form #1) provided by the program internship coordinator. The supervisor will submit the evaluation form for each intern to the program training coordinator. A summary of internship evaluation (Form #2) will be prepared by the training coordinator and at the end of internship period evaluation report of each intern will be submitted to Hospital Training and Education Office which will submit this report to Vice Dean for Hospital Affairs of the Faculty.

In addition, interns will also be evaluated for their commitments in completing portfolio assigned to them. Portfolio assessment will be performed at the end of training period. The portfolio file needs to be submitted for review to the university internship staff of the program one week before the meeting. Later, a meeting of university staff with interns will be arranged to discuss intern's achievements as well as strength and weakness in preparation of the portfolio. Intern will also be provided with the marks (20 marks for the portfolio). The schedule of university staff visit is given in the table below (Table 1):

Table 1: Timeline, interval of training and assessment

Month	1	2	3	4	5	6	7	8	9	10	11	12
Training interval	1st training interval			2nd training interval		3rd training interval			ıg			
Assessment			Е	Р		Е		Р			Е	Р

E = Intern evaluation in the hospital

P = Intern portfolio assessment

b. Evaluation of interns by program internship committee:

The evaluation of interns by program internship committee has 20% weightage. Each intern is evaluated by this committee using a prescribed form **(Form #3)** for his/her professional development and continued medical education on the basis of her participation or attendance in faculty/university scientific conferences, seminars, symposia and workshops. Each intern must fill the details of his/her participation or attendance and attach copy of certificates when submitting the booklet at the end of internship. This section carries 10 marks. Failing to do so will lose these marks.

Interns will also be evaluated by this committee for the following two things:

- a) Participation in community activities and services carries 5 marks. Each intern needs to list their participation and attach certificates.
- b) Filling intern feedback form **(Form #4)** at the end of each rotation of the internship is essential. Filling intern feedback form also carries 5 marks. Any intern not filling intern feedback form for the disciplines in which they are trained will either lose these marks or gets less mark if filled partially.

VIII. Evaluation of training rotations by interns:

Interns' evaluation of rotation sites is a part of our reciprocal evaluation procedure. Interns must fill intern feedback form **(Form #4)** at the end of each rotation. Interns must make sure that intern feedback form for all disciplines are filled in which they are trained and submitted to program internship coordinator at the end of each rotation.

IX. <u>Internship grading</u>:

Grades for clinical nutrition internship are calculated using intern evaluation forms (Form #1 and #2) and evaluation by program internship committee (Form#3). Percent/grades are determined based on the performance in each of the components. The final percentage out of 100 is worked out as follows: 80% weightage will be given to hospital training evaluation and 20% weightage for program internship committee evaluation. The minimum of 60% is required for successful completion of internship. The percentage component of grades is then converted to letter grades. University grading system is used to determine the grade (please see the table-2 below).

Table 2: University Grading System

Percentage obtained	Grade	Letter Grade
95 to100	Exceptional	A ⁺
90 to 94	Excellent	Α
85 to 89	Superior	B ⁺
80 to 84	Very Good	В
75 to 79	Above Average	C+
70 to 74	Good	С
65 to 69	High pass	D ⁺
60 to 64	Pass	D
Less than 60	Fail	F

Note: All forms are available in the "Forms" section.

X. <u>Award of internship certificate</u>:

After successful completion of training, intern should submit the "internship booklet" duly signed by the supervisors for each rotation to program internship coordinator. The intern will be granted a certificate by the Faculty after approval of clinical nutrition internship committee.

Note: Any intern who fails to submit internship booklet will not be awarded internship completion certificate.

AGREEMENT LETTER

Dear Intern,
Please read carefully Rules, Regulations and Guidelines stated for internship year. Sign the statement below to ensure that you understood all contents of internship and agree to adhere to the Rules, Regulations and Guidelines.
I have read, understood, and agree to adhere to the Rules, Regulations and Guidelines stated in Clinical Nutrition Internship Booklet.
Intern Name: University ID No:

Signature:

PROPOSED TRAINING SCHEDULE

Internship Discipline	Number of Weeks
Orientation	3*
Food services area	3
Surgery	4
Medical ward	6
Dialysis	3
Pediatrics	4
Obstetrics and gynecology	4
Intensive care unit	4
Orthopedics	2
Cardiology	4
Clinic, diabetic or weight management center	5
Oncology	2
Neurology	2
Optional	2**
Total training period	48

^{*} One-week orientation in each hospital

RAMADAN AND HAJJ HOLIDAYS

NOTE: Interns should follow Hospital rules and regulations for Ramadan and Hajj holidays.

^{**} Maximum 2 weeks for optional training in other hospital wards not listed above.

Internship Rotation Sheet

Name of the Hospital:	
itaine of the hospital.	

Hospital departments	Total Weeks	Training weeks in the hospital	Period (dates)	Remaining weeks	Rotation order
Orientation	3				
Food services area	3				
Surgery	4				
Medical ward	6				
Dialysis	3				
Pediatrics	4				
Obstetrics and gynecology	4				
Intensive care unit	4				
Orthopedics	2				
Cardiology	4				
Clinic, diabetic or weight management center	5				
Oncology	2				
Neurology	2				
Optional	2				

- 1. The interns should rotate in all the wards of above list in different hospitals during the internship. The rotation is intern's responsibility.
- 2. Optional weeks are chosen according to:
 - a. Any department in which intern needs further training.
 - b. Other departments not listed above such as: metabolic disorder diseases, psychiatric, rehabilitation, CCU, etc.

Note: Please indicate where you would like to spend more, less or the same amount of time in the above mentioned sections, and why?

Safety Measures in Clinical Nutrition

All interns must read and understand the information given below with regards to safety measures to be adopted during the internship in the hospital and in particular to food services area. Interns must adhere to written and verbal safety instructions throughout the internship period. Although safety information will be provided by the hospital safety officer before the beginning of internship, following general safety guidelines will help you to work in safe environment during the internship period. Each intern must sign below to ensure that he/she understood all the contents of safety considerations.

	Tasks					
A.	General safety measures					
1	Always wear proper uniform or apron while working. After work, leave the apron in an assigned cabinet or area.					
2	Shoes should be fluid impermeable material and cover the entire foot.					
3	Always cover any cut, insect bite or open wound with water-proof adhesive dressing.					
4	Gloves should be removed (unless stated to wear) before handling telephones, computer keyboards, equipments, utensils, doorknobs, etc.					
5	Eating, drinking, smoking and chewing gum are prohibited in the working area.					
6	Mouth pipetting must not be done.					
7	Hands should be washed with soap and water after finishing the work.					
8	Inform your supervisor about any accidents or potential hazard.					
9	Follow standard safety precautions issued by the hospital.					
	Tasks					
В	Safety measures in food services area					
1	Must wear personal protective equipment (gown, gloves, masks, etc.) and hair restraint should be worn when handling food materials.					
2	Fingernails should be short, unpolished, and clean.					

3	The application of cosmetics within food services area is strictly prohibited.
4	Contact lenses should not be worn while working in the food services area.
5	Working surfaces in food services area should always be cleaned before and after use.
6	All waste and contaminated materials should be disposed in appropriate containers.
7	Follow standard air borne safety precautions.
С	Emergency response
C	Emergency response Read safety and fire alarm posters and follow the instructions during an emergency.
	Read safety and fire alarm posters and follow the instructions during an

Intern's Name:		
Signature:	Date:	

Internship Portfolio Clinical Nutrition

PORTFOLIO CONTENTS

S. No	Details
1	Intern's personal information
2	Portfolio instructions
3	Internship rotation sheet
4	Internship orientation checklist
5	Food services (food management, food hygiene and evaluation of diet order)
6	Nutrition care process logbooks
7	Appendices
8	Evaluation of interns by clinical nutritionist
9	Intern feedback of internship

Intern Personal Information

Intern Name	
University ID	
Hospital Name	
Period of Internship	
Portfolio No.	

Portfolio Instructions

- 1) Personal information should be filled completely.
- 2) Internship rotation sheet should be completed by the interns on the first day of the training of each rotation with the help of hospital supervisor.
- 3) The orientation week in the hospital includes information about: different hospital departments, training period in each department, the role of nutrition in each department, safety and emergency practices in the hospital, hospital staff members' knowledge and remarks about nutrition. Interns must complete the orientation checklist during the first week of the orientation and submit to university supervisor of each hospital, who will submit to program internship coordinator.
- 4) Food services manual contains following parts:
 - a. Food management: determining the role of dietician in the food services area.
 - b. Food hygiene: monitoring and recording of Hazard Analysis and Critical Control Points (HACCP) system protocol with flow diagrams, identifying hazard analysis and critical control points in food processing area.
 - c. Determining suitability of diet menus of Ministry of Health for the patients.
 - d. Evaluation of diet order from the doctor and how to communicate to medical staff (doctors and nurses) to make suitable nutritional modifications to the order as well as to enteral and parenteral feeding.
 - e. Evaluation of served meals with respect to specific disease.
 - f. Evaluation of served meals according to diet order.
 - g. Follow-up the acceptance and satisfaction of the patients to the diet.
 - h. Evaluation of worker's performance and their knowledge about clinical nutrition.
- 5) Complete one case weekly in the logbook by computer and add corresponding charts, figures and diagrams.
- 6) Participations and presentations in conferences, symposiums and hospital seminars and preparation of their hand-outs.
- 7) Evaluation of interns by will be accomplished by:
 - a. hospital supervisor (Form #1 and #2),
 - b. internship committee (Form #3), and
- 8) Evaluation of internship by the interns will be performed by filling Intern's feedback form (Form #4).

Internship Rotation Sheet

Name of the Hospital:	

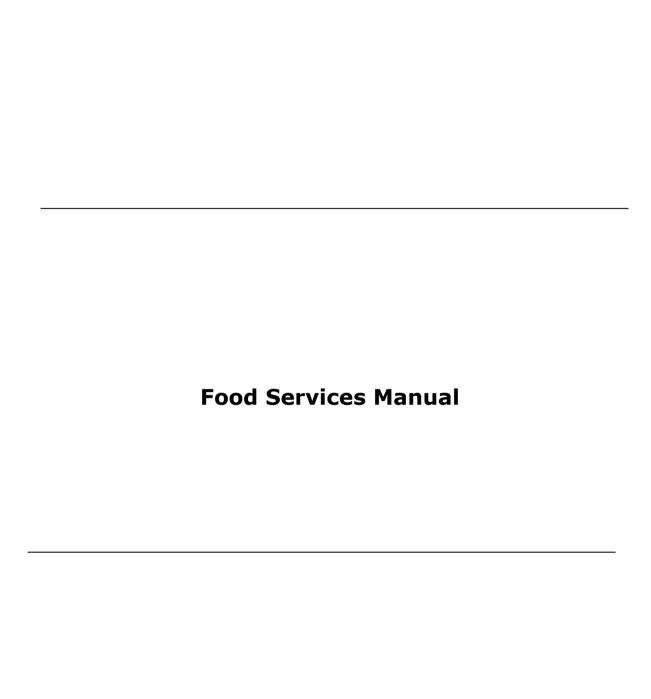
Hospital departments	Total Weeks	Training weeks in the hospital	Period (dates)	Remaining weeks	Rotation order
Orientation	3				
Food services area	3				
Surgery	4				
Medical ward	6				
Dialysis	3				
Pediatrics	4				
Obstetrics and gynecology	4				
Intensive care unit	4				
Orthopedics	2				
Cardiology	4				
Clinic, diabetic or weight management center	5				
Oncology	2				
Neurology	2				
Optional	2				

- 1. The interns should rotate in all the wards of above list in different hospitals during the internship. The rotation is intern's responsibility.
- 2. Optional weeks are chosen according to:
 - a. Any department in which intern needs further training.
 - b. Other departments not listed above such as: metabolic disorder diseases, psychiatric, rehabilitation, CCU, etc.

Note: Please indicate where you would like to spend more, less or the same amount of time in the above mentioned sections, and why?

Internship Orientation Checklist

Nam	e of t	he Hosp	oital:
Instru	ıction	c'	
Please conside please	comple red to explair ity su	ete the fo be an ir n under t	ollowing by ticking (\sqrt) "Yes" or "No" box. Items' identification is apportant part of a successful orientation. If the answer is "No", the comment section. Please return the form with comments to of each hospital, who will submit this to program internship
No.	YES	NO	
1.			Staff was informed about the intern prior to their arrival.
2.			Hospital policies that may have impact on the intern have been discussed.
3.			The intern has met the head of the clinical nutrition department and other workers.
4.			The intern is aware of training center in the hospital and the identification card was obtained.
5.			The intern is aware of the hospital profile and wards.
6.			The intern has toured the hospital.
7.			Rotation sheet was completed based on hospital's wards.
8.			Hospital's nutrition assessment and screening sheets were completely understood.
9.			The intern is aware of dress requirement, safety and emergency procedures.
10.			The intern is aware of the availability of classrooms or conferences areas.
11.			The intern is aware of the library facilities within the hospital.
12.			Skills and evaluation forms have been discussed.
13.			Comments: About orientation week that have been brought forth either by the intern or hospital supervisor.
Any ot	her co	mments	:
Intern Signat			



A.Food Management and Hazard Analysis and Critical Control Points (HACCP)

Code	Food Service and Quality Control in Hospital	Observations
A	Menu control:	
1	What types of menus are used?	
	12.	
	34.	
	56	
	78	
	910	
	11	
2	How often does the menu change?	
В	Ingredients control:	
	Are recipes standardized?	
3	1. Yes 2. No 3. Uncertain	
	Explain ingredient control procedure used.	
4		
	List standardized portion sizes for some of the items on the menu; for example, soup, a casserole, meat, fish, poultry, vegetable, dessert, etc.	
5		
	The portions are:	
6	1. Adequate 2. Too large 3. Too small	

Code	Food Service and Quality Control in Hospital	Observations
С	Purchasing control:	
7	Who is responsible for purchasing?	
8	What are their qualifications?	
9	Are specifications used? If so, who determines the specifications?	
10	What are purchasing procedures?	
11	The purchasing procedures are: 1. Formal 2. Informal 3. Another	
12	Your comments on purchasing process:	

Code	Food Service and Quality Control in Hospital	Observations
D	Receiving and storage:	
13	Describe receiving process:	
14	Describe storage and issuing processes:	
15	What method(s) is/are used for inventory control?	
16	Your comments on receiving and storage processes:	

Code	Food Service and Quality Control in Hospital	Observations
E	Computer use:	
17	Are computers used in the facility? 1. Yes 2. No	
	Are computers used in diet planning?	
18	1. Yes 2. No	
	If so, what kind are they and what are their functions?	
19		
_		
F	Financial control:	
	What financial reporting forms are used, and by whom?	
20		
	Your comments on financial control process.	
21		

Code	Food Service and Quality Control in Hospital Checklist	Observations
G	Personnel:	
22	Describe the plan for orientation and training procedures:	
23	Are there procedures in place to protect employees from accidents and injuries? 1. Yes 2. No	
24	Emergency policies for kitchens accidents and injuries: 1. Available	
25	Your comments on receiving and storage processes:	
Н	Sanitation and safety:	
26	Sanitation and safety: 1. In use 2. Not in use	
27	How food temperature is monitored?	
28	Are there any thermometers in use? 1. Yes	

Code	Food Service and Quality Control in Hospital	Observations
Н	Sanitation and safety: (continue)	
29	What are the procedures for preparing and storing potentially hazardous foods?	
30	What types of cleaners and sanitizers are being used?	
31	What waste disposal and recycling methods are used?	
32	What measures are taken for insects, rodents and pest control and eradication?	

Code	Food Service and Quality Control in Hospital	Observations
Н	Sanitation and safety: (continue)	
	What is routine for washing, rinsing or sanitizing food contact surfaces and the utensils used in the preparation of foods?	
33		
	How frequently is there an in-house inspection?	
34		
	Where fire extinguishers are located and what type are they?	
35		
I	Types of cooking methods:	
_	Dry-heat methods:	
	1. Baking barbecuing 2. Broiling	
36	3. Grilling 4. Roasting searing	
	5. Toasting 6. Rotisserie	
	Moist-heat methods:	
37	1.0.00 Hour mothers	
	1. Blanching 2. Boiling	
	3. Braising 4. Simmering	
	5. Steaming 6. Stewing	

Code	Food Service and Quality Control in Hospital	Observations
I	Types of cooking methods: (continue)	
38	Fat-based methods: 1. Browning	
39	Device-based methods: 1. Bain-marie	
40	1. Yes 2. No	
J	Types of measurement:	
41	Metric and imperial measures: 1. Liters and milliliters	
42	Home-made measures: 1. Cups 2. Spoons 3. Another	
43	Are personnel having knowledge about the conversion tables? 1. Yes 2. No	
K	Meal setting:	
44	Meal -courses: What are the most common food items of meal courses? 1. A soup course	
L	Herbs and spices:	
45	What is the main purpose of their use? 1. Culinary	
46	1. Yes 2. No	

Code	Food Service and Quality Control in Hospital	Observations
L	Herbs and spices: (continue)	
47	1. Mustard 2. Black pepper 3. Nutmeg 4. Cinnamon 5. Cloves 6. Saffron 7. Turmeric 8. Ginger 9. Fennel 10. Another	
48	Do personnel use medicinal herbs?	
	1. Yes 2. No	
49	1. Sage 2. Fenugreek 3. Parsley 4. Cardamom 5. Thyme 6. Licorice 7. Basil 8. Another	
50	1. Diverticulitis 2. Osteoarthritis 3. Colitis 4. Liver 5. Cancer 6. Gout 7. High cholesterol 8. Gallstones 9. Ulcers 10. Diabetes 11. Arthritis 12. Anemia 13. Hypertension 14. Atherosclerosis 15. Gout	
М	Selection of food items:	
51	The predominant food items used due to: 1. Cultural factors	
N	Cooking ware:	
52	1. Heat conductivity 2. Durability 3. Reactivity 4. Maintenance 5. All of the above 6. Another	

Code	Food Service and Quality Control in Hospital	Observations
N	Cooking ware: (continue)	
53	Types of cooking ware used: 1. Stainless steel	
54	Please comment on cooking and methods of evaluation:	

B- Diet Order Evaluation

Code	Hospital c	liet order ev	aluation served to pa	tients	Notes
	Who described the	diet order?			
55	1. Dietitian		2. Physician		
	3. Other				
	Can dietitian modify	y die <u>t o</u> rder?)		
56	1. Yes		2. No		
	3. Sometimes				
	Is hospital menu ap	propriate fo	or patient requiremen	ts?	
57	1. Yes		2. No		
	Does dietitian follo	w diet order	?		
58	1. Yes		2. No		
	3. Sometimes				
	Is diet order appro	priate for the	e case?		
59	1. Yes		2. No		
	Does the served me	eal suitable f	or diet order?		
60	1. Yes		2. No		
	Is the served meal	proper for th	ne patient's disease?		
61	1. Yes		2. No		
62	Your Comments:				

C- Patient Meal Satisfaction

Code	Patient Meal Sati	sfaction	Notes
60	Do you eat served meal?		
63	1. Yes	2. No	
	If you don't eat served meal, what are	the reasons for it?	
64	1. Quantity of meal	2. Quality of meal	
	3. Time of meal	4. Appearance of meal	
	The taste/flavor of your food was:		
65	1. Very good 2. Good	3. Acceptable	
	4. Needs improvement		
	The overall appearance of your meal t	ray was:	
66	1. Very good 2. Good	3. Acceptable	
	4. Needs improvement		
	The variety of foods you received was	:	
67	1. Very good 2. Good	3. Reasonable	
	4. Needs improvement		
	The temperature of your:		
	Hot food was:		
68	1. Very good 2. Good	3. Suitable	
	4. Needs improvement		
	Cold food was:		
69	1. Very good 2. Good	3. Acceptable	
	4. Needs improvement		
	Friendliness and service of staff was:		
70	1. Very good 2. Good	3. Satisfactory	
	4. Needs improvement		
	The size of portions was:		
71	1. Very good 2. Good	3. Reasonable	
	4. Needs improvement		
	Time to get rid of food was:		
72	1. Very good 2. Good	3. Satisfactory	
, 2	4. Needs improvement		
	The cleanliness of fork, spoon and disl	hes served was:	
73	1. Very good 2. Good	3. Satisfactory	
	4. Needs improvement		

Code	Patient Meal Satisfaction	Notes
	Quality of foods services in this hospital was:	
74	1. Very good 2. Good 3. Satisfactory	
	4. Needs improvement	
75	Are you on a special diet?	
75	1. Yes 2. No	
7.6	Have we met your cultural food preferences?	
76	1. Yes 2. No	
	Have you been receiving same meals for?	
77	1. 1-7 Days 2. 8-14 Days 3. >15 days	
	Does dietitian visit you?	
78	1. Daily 2. Every 3 days 3. Every 5 days	
	4. Weekly 5. Does not visit	
	During your stay at the hospital, what has been your favorite meal?	
79	1. Breakfast 2. Lunch 3. Supper(Dinner)	
	4. Snacks	
	Can you say that this hospital serves more quality foods services	
80	compared to other hospital?	
	1. Yes 2. No	
	During your stay at the hospital, what has been your least favorite food or meal?	
81	1 2 3	
	4	
	Do you have any suggestions as to how food services can be	
	improved?	
82	1	
02	3	
	5	
83		
63	Please give your comments on patient meal satisfaction.	

EVALUATION OF DIETS

Code	Evaluation of Special Diets	Notes
84	Identify evaluation techniques of special diets in terms of recommended dietary allowances:	
85	Identify evaluation techniques of special diets in terms of dietary modifications:	
86	Identify evaluation techniques of special diets in terms of food allowed and not allowed (prohibited).	

Food Services and Quality Control Logbook

Food Safety in Hospitals

1. Receiving:

Food inspection										
Hospital nai										
			uation of sensory properties				Production	Expiry		
	appear		colo		text		sm		date	date
	Good	Bad	Good	Bad	Good	Bad	Good	Bad		
Observation	1:									
										······································

2. Storage:

Food	/raw m store	aterial	ire		<u>ج</u> ه	Ventilation adequacy		ween of)	Hygienic quality of store			
Dry food	Frozen food	Chilled food	Temperature (C°)	Humidity (%)	Is there any food with Expiry date	High	Medium	Low	Are there spaces between the pallets of food (Y/N)	High	medium	Low

3. Preparation of meals:

Cleaning of food surfaces (high/medium /low)	Are there detergent, disinfectant or pesticides in food preparation area (Y/N)	Are there separate boards for cutting raw foods (Y/N)	Cleaning of utensils (high/medium /low)	Cooking tempera ture (C°)	Sources of contamination

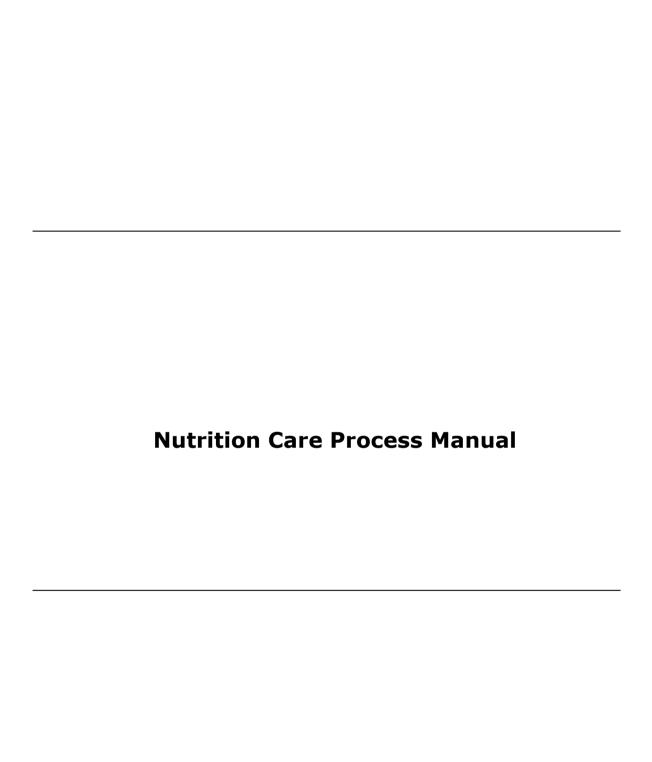
4. Meal service:

	Tra	nspor	tation	Food			
Food	Cleanliness of transport trolleys			transportation and ribution	Keeps cold foods as	Keeps hot foods as	
items	High	medium	Low	Immediate delivery of the meal to the patient (Y/N)	Delayed delivery of the meal to the patient (Y/N)	cold	hot

5. Sanitation facility:

	Waste disposal f	rom food services are	a
Methods	How frequently used (weekly/daily/hourly)	Waste containers are provided with lids	Waste containers' areas/rooms are kept in hygienic condition (Y/N)
1. Food handlers			
2. Food waste			
3. Chemical waste			
4. Garbage removing			
5. Others (specify):			
What protective measur			
Method	S	How fre	equently used
Routine for washing, rin	nsing or sanitizing f	food contact surfaces	and the utensils
Method	s	How fre	equently used

Hospital implement HACCP	CP Yes □ No □					
If answer is Yes, please fill the following table	fill the following table					
		HACC	HACCP FORM			
MENU ITEMS/PRODUCTS:	is:					
PROCESS STEPS	(S)HYZARD(S)	CCPs (Y/N)	CRITICAL	MONITORING	CORRECTIVE ACTIONS	VERIFICATION
RECIEVE						
STORE						
PREPARE						
соок						
REHEAT						
НОГР						
SERVE						



Nutrition Care Process (NCP) Screening Logbook

Intern Personal Information

Intern Name	
University ID	
Name of Hospital	
Email Address	
Date of Training	
Week Order	
Case Number	

Logbook Instructions

Guidelines on documenting:

- 1. Be legible
- 2. Use only approved or standard abbreviations
- 3. Do not eliminate anything from the medical record.
- 4. Do not use of correction fluid anywhere in the record.
- 5. Nutrition reports should be submitted in time.
- 6. Do not insert back dated notes into the chart. If necessary, write an addendum and date it.
- 7. Do not make uncomplimentary remarks about patients; remember that patients and courts can access the medical record.
- 8. Complete the following record in the order of NCP steps.

II.The NCP steps according to A.D.I.M.E. format:

Step 1: Nutrition assessment Step 2: Nutrition diagnosis Step 3: Nutrition intervention

Step 4: Nutrition monitoring and evaluation

III. Essential information for using this logbook:

- The logbook (daily training record) has been designed to enable interns to record necessary aspects of their training experience during the internship program, at any training site.
- Interns are responsible for maintaining up to date logbook at all times.

IV. Confidentiality:

- 1. You must not identify patients by name.
- 2. Cases should be recorded by hospital number and/or patients' initials.
- 3. Total grade of the fully completed logbook is 250 marks.
- 4. The logbook should be completed/ filled by using computer. No hand written logbook will be accepted.

Step 1: Nutrition Assessment (114 marks)

Patient Information (18 marks)

A. ADMISSION DATA:	
1. File no:	
2. Section name:	3. Bed no:
4. Age:	5. Gender: M □ F □
6. The main reason for admiss	sion (write name of disease):
7. Duration of disease(s):	
8. Date of admission:	
9. Area of living: City Rura	al area or villages Small towns Refused to answer
10. Family structure: Live alo	ne \square With wife only \square 3 members \square
>3 mer	nbers \square Refused to answer \square
11. Education level attained:	Not educated □ Primary □ Secondary □ Intermediate □
	University \square Master or PhD \square Refused to answer \square
12. Income level:	
☐ Low income (less than 2000 S	₹)
☐ Mid-income (>2000- less than	5000 SR)
☐ High income (≥5000 and abov	e)
$\hfill\square$ Refused to answer	
13. Main language spoken at l	nome: Arabic Other (specify:)
14. Disability Yes □	No □
If yes, specify:	
15. Do you have a car at home	e: Yes 🗆 No 🗆
16. Do you smoke cigarettes?	Yes □ No □
If yes, how many/day?	
How often?	
17. Type of drinking water:	Water pipe □ Desalinated water □ Bottled water
	Well water \square Other:(specify) Refused to answer \square
Comments: (how can you use	this information for nutritional care process?)

2. Medical History and Health Problems (6 marks)

I.	Reason 1	for see	king r	nedic	al care	e: (mai	n comp	lains, s	sympto	ms or dis	sease)	
	Nausea		Vomiti	ng		Heartl	ourn			Consti	oation	
	Diarrhea		Colon	disturb	ance		Anemi	ia		Hypert	ension	
	Diabetes r	nellitus		Renal	disease	es 🗆		Cardi	ovascul	ar diseas	ses	
	Disturband	ce in pe	riods'		Food a	allergy						
	Others: (s	pecify)										
IJ	. Surgeri	es (in	the pa	st):								
	1. History	•	-	,		Yes		No				
	2. GIT res	•		nstitutio	on	Yes		No				
	3. Organ	transpla	ants			Yes		No				
	4. Postop	erative	infectio	ns		Yes		No				
	5. Slow h	ealing v	vounds			Yes		No				
	6. Fistula	s or ost	omies			Yes		No				
	7. Not ap	plicable				Yes		No				
r T	I. Psychia	atric hi	storv									
	Depressi			Eatin	a disorc	ders		Psvc	hosis			
	Others: (_			, , ,				
	Without	problem	ıs									
I۱	/. Medica	l thera	ру:									
	Dialysis			Chem	otherap	οу		Radia	ation th	erapy		
	Mechanio	cal vent	ilation [Medic	ation t	herapy		Not a	applicabl	e □	
	Others: ((specify)									
V	List me suppleme dose, free	edication entation)? Also	comple	ete the	followi	ng table	e which	n includ			

No.	Name of the drug (or active compound)	Drug usage (dose, frequency and route of admission)	Drug-nutrient interaction (with side effects if present)
Com	ments:		

3. Laboratory Analyses (40 marks)

	The tests/variables	Value (unit)	Normal range (unit)			
а	Complete blood counts (CBC):					
1	White blood cells (WBC)					
2	Red blood cells (RBC)					
3	Hemoglobin (HGB)					
4	Hematocrit (HCT)					
5	Mean corpuscular volume (MCV)					
6	Mean corpuscular hemoglobin (MCH)					
7	Mean corpuscular hemoglobin concentration (MCHC)					
8	Platelets count (PLT)					
В	Liver function:	l				
1	Aspartate aminotransferase (AST)					
2	Alanine aminotransferase (ALT)					
3	Alkaline phosphatase					
4	Albumin					
5	Total protein					
С	Blood glucose:					
1	Fasting					
2	Postprandial					
d	Kidney functions test:					
1	Blood urea nitrogen (BUN)					
2	Creatinine					
3	Uric acid					
е	Lipid profile:					
1	Total cholesterol					
2	Low-density lipoprotein (LDL)					
3	High-density lipoprotein (HDL)					
4	Triglyceride (TG)					
5	Total lipids					

	The test/variable	Value (unit)	Normal range (unit)
f	Other biochemical tests:		
1	Sodium		
2	Potassium		
3	Calcium		
4	Phosphors		
5	Iron		
6	Pre-albumin		
7	C-reactive protein		
8	Transferrin		
g	Add results of other tests if necessar cultures, etc.)	y (e.g. stool, urine, ı	microbiological

Please comment on the laboratory findings from the point of nutritional care according to needs of the patient's condition and disease?

4. Physical Examination and Appearance (13 marks)

a. Performance	b. Skeletal and body	c. Skin		
	composition			
1. Ability to communicate	1. Genu valgum	1. Pallor (pale skin color)		
Yes □ No □	Yes □ No □ CM*□	Yes 🗆 No 🗆 CM 🗅		
2. Conscientious	2. Genu varum	2. Scaly dermatitis		
Yes □ No □	Yes 🗆 No 🗆 CM 🗅	Yes 🗆 No 🗆 CM 🗅		
3. Restlessness	3. Paralysis	3. Follicular hyperkeratosis		
Yes □ No □	Yes No CM	Yes 🗆 No 🗆 CM 🗆		
4. Fine motor skills	4. Amputations	4. Pellagra		
Yes 🗆 No 🗆	Yes 🗆 No 🗆 CM 🗅	Yes 🗆 No 🗆 CM 🗆		
5. Dementia	5. Muscle wasting	5. Dermatitis		
Yes □ No □	Yes No CM	Yes 🗆 No 🗆 CM 🗆		
Difficulty in walking	6. Shortened stature	6. Skin eruptions		
Yes 🗆 No 🗆	Yes 🗆 No 🗆 CM 🗅	Yes 🗆 No 🗆 CM 🗆		
7. Unsteady movement	7. Ankle edema (enlargement)	7. Bruisability (skin bruises)		
Yes □ No □	Yes Do CM C	Yes 🗆 No 🗆 CM 🗆		
8. Encephalopathy	8. Ascites	8. Petechia		
Yes 🗆 No 🗅	Yes 🗆 No 🗆 CM 🗅	Yes 🗆 No 🗆 CM 🗆		
	9. Goiter			
	Yes 🗆 No 🗆 CM 🗅			
d. Hair	e. Nail	f. Eyes		
		,		
1. Dry, dull hair	1. Abnormal nail shape or color	1. Xerophthalmia		
Yes 🗆 No 🗆 CM 🗅	Yes 🗆 No 🗆 CM 🗅	Yes □ No □ CM □		
2. Corkscrew hair	2. Koilonychias (spooning of	2. Night blindness		
Yes 🗆 No 🗆 CM 🗅	fingernails)	Yes □ No □ CM □		
	Yes No CM			
	3. Periungual hemorrhage	3. Changes in vision		
	Yes No CM	Yes □ No □ CM □		
g. Mouth	h. Respiration	i. Feeding		
3		3		
 Bleeding gums (Gingival 	1. Breathlessness	1. Enteral feeding tubing or		
Hemorrhage)		device		
Yes 🗆 No 🗆 CM 🗆	Yes □ No □ CM □	Yes □ No □		
2. Cheilosis	2. Palpitation	2. Parenteral feeding tubing		
		or catheters		
Yes No CM	Yes 🗆 No 🗆 CM 🗅	Yes □ No □		
3. Sore tongue				
Yes No CM				
4. Smooth tongue				
Yes 🗆 No 🗆 CM 🗆				
5. Dental caries				
Yes 🗆 No 🗆 CM 🗆				
6. Glossitis				
Yes No CM				
Comments:				

* CM = cannot be measured

Vital signs: (See appendix no. 1 for normal values for physical examination)

BP Mm Hg;

TemperatureoC; Pulse...../ min

5. Anthropometric Measurements (7 marks)

•	Current weight: kg <u>or</u> use alternative methods to determine weight:
	o Knee calf (cm)
	o Knee height (cm)
•	Height: cm or use alternative methods to determine height:
	o Arm span (cm) or
	o Ulna length (cm)
•	BMI:kg/m² (or MUAMC value from above)
•	Triceps skin fold (TSF): (mm)
•	Arm circumference (AC): (cm)
W	eight History:
	o Has the patient gained weight recently?
	o No □ Not sure □ Yes □
	 Has the patient lost weight recently?
	o No □ Not sure □ Yes □
	o If yes, please mention for how long this weight changes occurred?
	days.
6.	Dietary Assessment and History of Intake (10 marks)
	• Usual food intake: normal \square less \square nothing by mouth at all \square
	 Complete a 24hr-Recall sheet for the patient (ask at the end of the patient meeting)
	Please see appendix no.6 and add it to the main body $\underline{\text{NOT}}$ in the appendix.
	Type of diet ordered by physician in the hospital
	 Please comment and evaluate hospital diet order that has been served to the patient (taking care of the symptoms and diagnosis):

7. Energy and Nutrients Re	quirements Calculation ((20 marks)
----------------------------	--------------------------	------------

a. Desired and adjusted body weight

- Desired weight (kg) (See appendix no. 2)
- o Adjusted body weight (ABW) for obese patients?

(Note that ideal weight = height in cm - 100)

According to following equation for both male and female:

ABW =
$$0.25 \times (actual weight - ideal weight) + ideal weight$$

$$ABW = 0.25 \times (....Kg - ...Kg) + ...Kg$$

b. Total calories requirements

(See appendix no. 3 for Harris-Benedict equation and other required factors) Basal metabolic rate (BMR) (write calculations according to gender in the table below)

Men: 66.5+[(13.8 x weight/kg)+(5 x height/cm)-(6.8 x age)]	Women: 655+[(9.6 x weight/kg)+(1.8 x height/cm)-(4.7 x age)]

- 1. **BMR** = Kcal
- Injury factor (IF) = Injury (stress) factor (Appendix no. 3) X BMR (Step no. 1)

3. Thermal effect of food (TEF) = BMR (Step no. 1) \times 0.1

- **c. Protein needs (................%) =** g/day
- **d. Carbohydrate needs (..........%) =** g/day
- e. Total fat requirement (........ %) =g/day
- **f.** Water or fluid needs = ml/day

Step 2: Nutritional Diagnosis (20 marks)

See appendix no. 4 for defining criteria for nutritional diagnosis See appendix no. 5 for list of possible nutritional diagnosis

1) Please provide nutritional diagnosis for the current patient:
Problem:
Etiology:
Signs/Symptoms:
2) Please state possible nutritional diagnosis:

Step 3: Nutrition Intervention or Dietary Management (26 marks)

Nutrition Plan:

	What is/are dietary patient (based on problem)? (6 marks)	your)	nutritiona	l diagnos	is and tl	ne medical
b.	What is your main nu (5 marks) (i.e., your expectation					
b.	(5 marks)	ons as tondition	craining cov	vered only	in one day	visit)
	(5 marks) (i.e., your expectation e.g., improve health co	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended acc	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the
	(5 marks) (i.e., your expectation e.g., improve health confood recommended accommended	ons as tonditions	raining covers, food intake to the disease	vered only ke or physica se.	in one day al activity o	visit) r change the

C.	Nutrition education and nutrition counseling approach (15 marks)
•	What you propose for patient education?
••••	
•	Choose theory of nutrition counseling as appropriate to the current patient: □ ABC theory
	□ Patient-centered model
	☐ Trans-theoretical or stage of change model
	□ Others (specify):
•	Please describe the following:
✓	What are your reasons for selecting this theory?
••••	
••••	
••••	
••••	
••••	
✓	How can you implement this theory according to your case?
••••	
••••	
••••	
••••	

Step 4: Monitoring and Evaluation Plan (90 marks)

1. Please fill the most important parameters that should be monitored according to your case, and how often to be measured?

No	Parameter	Critical indicators	Frequencies
	Anthropometric measures:		
	a. Height		
1	b. Weight		
	c. Others		
2	Signs/symptoms of edema		
3	Signs/symptoms of dehydration		
	Laboratory results:		
4	a. Glucose		
	b. Total cholesterol		
	c. Others		
5	Drug-nutrient interaction consequences		
6	Stool frequency and consistency (Please ask the patient)		
	Enteral or parenteral nutrition including:		
	a. Fluid intake/output		
7	b. Adequacy of enteral intake		
	c. Gastric residual		
	d. Serum electrolytes		
	e. Respiratory		
8	Others:		

2. From previous table, please write the reading for the follow-up schedule for each parameter in the following appropriate tables.

Table 2.1: Reading of the parameters that should be monitored daily

Parameter Date	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Table 2.2: Reading of the parameters that should be monitored more than once a week

Parameter Date	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7

Table 2.3: Reading of the parameters that should be monitored monthly

Parameter Date	Admission	Month 1	Month 2	Month 3	Month 4

3. Comments o	progress:
	ts of above tables, was your NCP plan successful? Yes \Box No \Box , determine the weak steps of your NCP plan, and re-plan this case an intoring and evaluation steps.
repeat the mo	, determine the weak steps of your NCP plan, and re-plan this case an
repeat the mo	, determine the weak steps of your NCP plan, and re-plan this case an
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repeat the mo	, determine the weak steps of your NCP plan, and re-plan this case an altoring and evaluation steps.

Patient's Nutrition Care Evaluation

NOTE: Please use scale 1 to 5 for intern's evaluation:

Poor=1 (<60%), Fair=2 (60-70%), Intermediate =3 (71-80%), Good=4 (81-90%), Excellent=5 (90-100%)

	Item	Score	Evaluation grade
	Patient medical and surgical histories reviewed and documented.		g. a.a.c
	Medication with potential food/drug interaction is assessed and documented.		
	Relevant laboratory values are noted and assessed for age/gender.		
Assessment	Height and weight are documented.		
	Subjective nutritional data are obtained and documented.		
	Nutritional requirements for energy/ protein/ fluid are assessed and calculated based on established standards for age/gender.		
	Appropriate nutritional priority and risk identified.		
	Average		
	Nutritional diagnosis made appropriately.		
Nutritional diagnosis	Correct PES statement written (problem-etiology-signs/symptoms).		
	Average		
	Nutrition care plan established which includes patient/family goals and objectives.		
	Meal plan established and implemented when needed.		
	Nutrition recommendations are appropriate for the patient condition.		
Intervention	Education assessment and plans are completed when appropriate.		
	Identified preferred method of learning (visual – auditory – reading–hands on).		
	When education is provided, patient/family understanding is documented.		
	Average		
	Outpatient nutrition clinic referral completed.		
	Nutrition recommendations/interventions are appropriate		
	based on assessed data of disease status, medical goals		
Monitoring	of therapy and biochemical parameters. Documentation completed for all steps.		
	Follow up, re-evaluate nutritional problems and plan with		
	supporting documentation.		
	Average		
Overall Averag	je		
Overall grade			

Evaluation result (Overall Average) = (1-2) Re-evaluation Evaluation result (Overall Average) = (3-5) Accepted

Appendices

Appendices

Appendix 1: Normal values for physical examination

Appendix 2: Quick estimate of desirable body weight

Appendix 3: Calculation of energy and nutrients requirements

Appendix 4: Criteria for nutritional diagnosis

Appendix 5: Possible nutritional diagnosis

Appendix 6: 24 hour-recall sheet

Appendix 7: Food exchanges for diet planning

Appendix 8: Distribution of food exchanges for breakfast, lunch and dinner

meals

Appendix 9: Daily food plan

Appendix 10: Frequency of monitoring of specific parameters

Appendix 1 Normal Values for physical examination

Vital signs

1. Temperature

Rectal: $C = 37.6^{\circ}/F = 99.6^{\circ}$

Oral: $C = 37^{\circ}/ F = 98.6^{\circ} (\pm 1^{\circ})$

Axilla: $C = 37.4^{\circ}/F = 99.3^{\circ}$

2. Blood pressure: average 120/80 mmHg

3. Heart rate (beats per minute)

Age	At rest awake	At rest asleep	Exercise or fever
Newborn	100-180	80-160	<u><</u> 220
1 week-3 months	100-220	80-200	<u><</u> 220
3 months – 2 years	80-150	70-120	<u><</u> 200
2-10 years	70-110	60-90	<u><</u> 200
11 years - adult	55-90	50-90	<u><</u> 200

Appendix 2 Quick estimate of desirable body weight

No	Men	Women
1	For first 5 feet, consider 106 pounds a reasonable weight. For each inch over 5 feet, add 6 pounds.	For first 5 feet, consider 100 pounds a reasonable weight. For each inch over 5 feet, add 5 pounds.
2	For each inch less than 5 feet, subtract 6 pounds	For each inch less than 5 feet, subtract 5 pounds.
3	Add 10% for a large-framed individual; subtract 10% for a small-framed individual	Add 10% for a large-framed individual; subtract 10% for a small-framed individual.
4	Example: for a man 5 feet 8 inches tall (medium frame), a desirable weight would be 154 pounds (106 lb + 48 = 154 lb).	Example: for a man 5 feet 6 inches tall (medium frame), a desirable weight would be 130 pounds (100 lb + 30 = 130 lb).

Hint:

- Use the following equivalents for your final calculations:
 - 1 Kg = 2.2 pounds
 - 1 pound = 0.45 Kg
 - 1 feet = 30.5 cm = 0.31 m

Appendix 3. Calculation of Energy and Nutrients Requirements

HARRIS-BENEDICT (Basal Energy Expenditure)

Men: $66.5 + [(13.8 \times \text{wt/kg}) + (5 \times \text{ht/cm}) - (6.8 \times \text{age})]$ **Women:** $655 + [(9.6 \times \text{wt/kg}) + (1.8 \times \text{ht/cm}) - (4.7 \times \text{age})]$

Mifflin- St Jeor equations (Basal energy expenditure)

Females: REE= $(10 \times \text{wt/kg}) + (6.25 \times \text{ht/cm}) - (5 \times \text{age}) - 161$ **Males:** REE= $(10 \times \text{wt/kg}) + (6.25 \times \text{ht/cm}) - (5 \times \text{age}) + 5$

Activity/injury factor

Multiply resting energy expenditure (REE) or basal energy expenditure (BEE) (from above) with activity/injury factor

A. Stress / injury factors:

Parameter	Stress or injury factor
None	1
Mild infection	1.2 X BEE
Moderate infection	1.4 X BEE
Sever infection	1.6 X BEE
Elective surgery	1 - 1.1 X BEE
Minor surgery	1.1 X BEE
Major surgery	1.2 X BEE
Skeletal trauma	1.35 X BEE
Head injury	1.6 X BEE
Burns (40% body surface area)	1.5 X BEE
Burns (100% body surface area)	1.9 X BEE
Multiple / long bone fraction	1.1 - 1.3 X BEE
Peritonitis	1.05 - 1.25 X BEE
Infection with trauma	1.3 - 1.55 X BEE
Sepsis	1.2 - 1.4 X BEE
Closed head injury	1.3 X BEE

Cancer	1.1 - 1.45 X BEE
Fever	1.2 x BEE per 1 C over 37°C

B. Activity factor:

Parameter	Activity factor
None	1
Confined to bed	1.2 X BEE
Out of bed	1.3 X BEE
Chair or bed – bound	1.2 X BEE
Work while seated with little movement and little or no leisure activity.	1.4 - 1.5 X BEE
Work while seated with requirement to move but little strenuous leisure activity.	1.6 - 1.7 X BEE
Standing work	1.8 - 1.9 X BEE
Strenuous work or highly active leisure activity.	2 – 2.4 X BEE

C. PROTEIN NEEDS:

Specific disease	Protein needs
Hepatic encephalopathy	0.4 g/kg/body weight advance as tolerated
Renal disease (without dialysis)	0.6-0.8 g/kg/body weight
Normal maintenance	0.8-1.0 g/kg/body weight
Renal disease (with dialysis)	1.2-1.5 g/kg/body weight
Repletion/moderate stress weight	1.0-1.5 g/kg/body
Severely stressed	2.0-2.5 g/kg/body weight

Hint: If you know the weight in pounds, use 1/2 of the amount recommended for weights in kilograms.

Example: Caloric need is 20 kcal/kg, it will be ~10 kcal/pound.

D. TOTAL WATER/ FLUID NEEDS:

Average 30-32 ml/kg 1.5 ml per kcal/day

Appendix 4 Criteria for Nutritional Diagnosis

- 1. This is different from medical diagnosis.
- 2. Nutritional diagnosis means the identification of a specific nutritional problem that dietetic practitioners will treat.
- 3. Categories of nutritional diagnoses:
 - a. Intake
 - b. Clinical
 - c. Behavioral
- 4. Summarized as PES Statement:
 - P: Problem
 - E: Etiology
 - S: Signs/symptoms (S/S)

5. Example of PES statement:

Problem: Excessive fat intake.

Etiology: Consumption of fast foods provided by family members 2-3 times/week.

<u>Signs/symptoms</u>: 10% weight gain in 90 days and increase in serum cholesterol to 230 mg/dl.

Nutritional diagnosis: This was due to excessive fat intake related to consumption of fast foods provided by the family members 2-3 times /week, which is indicated by increase in cholesterol level.

Note: If the diagnosis is written as **"Obesity"**, it will be considered as medical diagnosis, not nutritional diagnosis.

Appendix 5. Possible Nutritional Diagnosis

Domain: Clinical

Class: Functional balance

Swallowing difficulty

Chewing (masticator) difficulty

Breastfeeding difficulty

Altered gastrointestinal function

Class: Biochemical balance

Impaired nutrient utilization

Altered nutrition-related laboratory values

Food medication interaction Altered medical status (hyper)

Altered medical status (hyper

Altered medical status (hypo)

Class: Weight balance

Underweight

Involuntary weight loss

Overweight / obesity

Involuntary weight gain

Disordered eating pattern

Low adherence to nutrition-related

recommendations

Undesirable food choices

Class: Physical and environmental

balance

Physical activity

Excessive physical activity

Inability to manage physical self-care

Impaired ability to prepare foods/meals

Poor nutrition quality of life

Self-feeding difficulty

Class: Food safety access

Intake of unsafe food Limited access to food

Domain: Behavioral-Environmental

Class: Knowledge and believe

Food and nutrition-related knowledge deficit

Harmful beliefs/attitudes about food and

nutrition-related topics

Not ready for diet/lifestyle change

Evident protein-energy malnutrition

Inadequate protein-energy intake

Decrease nutrient (specify) needs

Imbalance of nutrients

Class: Oral intake balance

Inadequate oral food/beverage intake

Excessive oral food/beverage intake

Class: Fat and cholesterol balance

Inadequate fat intake

Excessive fat intake

Inappropriate intake of food fat (specify)

Class: Protein balance

Inadequate protein intake

Excessive protein intake

Inappropriate intake of amino acids (specify)

Class: Carbohydrate and fiber balance

Inadequate carbohydrate intake

Excessive carbohydrate intake

Inappropriate intake of types of carbohydrate

(specify)

Inconsistent carbohydrate intake

Self-monitoring deficit

Domain: <u>Intake</u>

Class: Caloric energy balance

Increased energy needs

Decreased energy needs

Inadequate energy intake

Excessive energy intake

Class: Nutrient intake balance

Increased nutrient (specify) needs

Inadequate fiber intake

Excessive fiber intake

Class: Vitamin intake balance

Inadequate vitamin intake (specify)

Excessive vitamin intake (specify)

Class: Mineral intake balance

Inadequate mineral intake (specify)

Excessive mineral intake

Class: Fluid intake balance

Inadequate fluid intake

Excessive fluid intake

Class: Bioactive substances balance

Inadequate bioactive substance intake

Excessive bioactive substance intake

Excessive alcohol intake

Class: Nutrition support

Inadequate intake from enteral/parenteral

nutrition

Excessive intake from enteral/parenteral

nutrition

Inappropriate infusion of enteral/

parenteral nutrition

Appendix 6 24 Hour-Recall Sheet

Meals	Type of foods	Prepared	Quantity (grams)
Before Breakfast			
Breakfast			
Between breakfast and lunch			
Lunch			

Meals	Type of foods	Prepared	Quantity (grams)
Between lunch and dinner			
Dinner			
After Dinner			

Appendix 7 Food Exchanges for Diet Planning

Exchange item	No. of food exchange	Carbohydrate (grams)	Protein (grams)	Fat (grams)	total calories	Sodium (mg)	Fiber (grams)	Cholesterol (mg)
Milk								
Fat free, low fat		12	8	0.3	90			
Reduced fat		12	8	5	120			
Whole		12	8	8	150			
Vegetable		5	2		25			
Fruit		15			60			
Starch/Bread		15	3	0.1	80			
Meat								
Very lean			7	1	35			
Lean			7	3	55			
Medium-fat			7	5	75			
High-fat			7	8	100			
Fat				5	45			
Total food intake								
Daily requirements								
% of daily requirements								

Appendix 8 Distribution of Food Exchanges for Breakfast, Lunch and Dinner Meals

	Numbers of		Quan	tity
Food	Exchanges for meals	Meals	(Grams)	Size
Milk Starchy vegetable Non-starchy vegetable Fruit Starch/bread Meat Fat	Breakfast			
Milk Starchy vegetable Non-starchy vegetable Fruit Starch/bread Meat Fat	Lunch			
Milk Starchy vegetable Non-starchy vegetable Fruit Starch/bread Meat Fat	Dinner			

Appendix 9 Daily Food Plan

File No	Age:	Gender:	M	F
Patient case:			_	
Diet: Regular diet:	Special diet	:		

	Time of		Quan	tity
Meals	serving	Diets	(Grams)	Size
Breakfast				
After Breakfast				
Lunch				
After Lunch				
Dinner				

Appendix 10 Frequency of Monitoring of Specific Parameters

Indicators	Frequencies
Weight	At least 3 times/week
Signs and symptoms of edema	Daily
Signs and symptoms of dehydration	Daily
Fluid intake/output	Daily
Adequacy of enteral intake to check vital signs	At least 2 times /week
Nitrogen balance: becoming less common	Every week, if appropriate
Gastric residual	Every 4 hours

FORMS

Form #1 Internship Evaluation form



Umm Al-Qura University Faculty of Applied Medical Sciences Department of Clinical Nutrition Evaluation of Interns by the hospital

Intern's name:					
Intern's ID number:					
Rotation number					
Hospital's name:					
Evaluation Parameters	Excellent	Very	Good	Average	Below
(If one of the parameters are not applicable, please add "N/A")	90-100	Good	71-80	60-70	average
		81-90			<60
General Competences					
1. Follow hospital regulations and codes.					
2. Punctuality and initiative for work.					
3. Adhere to safety rules.					
4. Exhibit verbal communication skills.					
5. Work as a team member.					
6. Ethics and professionalism					
Clinical Nutrition Competencies					
1. Assessment of outpatients/inpatients in the clinic and hospital					
wards (Collect anthropometric, dietary and medical history,					
interpret biochemical data)					
2. Capable of making nutritional diagnosis.					
3. Incorporate new and certified scientific knowledge into clinical					
practice.					
4. Capable of calculating requirements as indicated by the					
patients' health status.					
5. Participate in planning and implementing proper oral					
nutritional treatment.					
6. Participate in planning and implementing proper enteral and					
parenteral nutritional treatment (choosing of feeding formula,					
designing a full plan).					
7. Providing nutritional counseling/education to outpatients and					
inpatients in the clinic and hospital wards					
8. Documentation of nutritional assessment and intervention.					
9. Monitoring and evaluation of nutritional plan.					
10. Comply with quality control measures					
Total Percentage (%)= Sum of all % / 16 (if N/A is indicated,	Final grade	:			
put the number of parameters evaluated for example 15)					

Evaluator's name	
Evaluator's signature and stamp _	

Form #2 SUMMARY OF INTERNSHIP EVALUATION

(Confidential)

S.		Final Asses	ssment
No.	Hospital ward	Percentage (%)	Grade
1	Food services area		
2	Surgery		
3	Medical ward		
4	Dialysis		
5	Pediatrics		
6	Obstetrics and gynecology		
7	Intensive care unit		
8	Orthopedics		
9	Cardiology		
10	Clinic, diabetic or weight management center		
11	Oncology		
12	Neurology		
13	Optional (Specify:)		
	Total percentage (%)= sum of all %/13		
	Final grade		

Remarks (if any):	
Name of Clinical Nutrition Training Coordinator:	
Signature of Clinical Nutrition Training Coordinator:	
Date:	

Form #3 EVALUATION OF INTERN BY FACULTY INTERNSHIP COMMITTEE

(Confidential)

Each intern is also evaluated by the program internship committee for the professional development and continued medical education on the basis of participation or attendance in faculty/university scientific conferences, seminars and workshops.

This section represents 20% of the total internship evaluation. Each intern MUST fill this form and submit to **program internship coordinator** along with certificates of attendance and participation at the end of internship period for the review of internship committee.

NO	TITLE OF EVENT	VENUE	DATE	Obtained
I	ATTENDANCE/PRESENTATION IN FA	ACULTY/UNIVERSI		CE: 10 MARKS)
1				
2				
3				
4				
II	PARTICIPATION IN COMMUNITY SE	RVICES		(5 MARKS)
III	COMMITMENT TO FILL INTERN FEEL	DBACK FORM (FORM	1 #4) (!	5 MARKS)
тот	AL MARKS (20)			
Mer	nbers of Faculty Internship Comn	nittee:		
1. 1	Name:Signa	ture:	Date: _	
2. 1	Name:Signa	ture:	Date: _	
3. 1	Name:Signa	iture:	Date: _	

_____Signature: _____ Date: ____

Form#4 INTERN FEEDBACK OF INTERNSHIP (Intern form)

Υe	/ear:		Hospital:
1.	Intern Name:		
2.	2. Hospital Name:		
3.	3. Rotation Period: Dates: From:	to	(No of weeks)
1.	Name(s) of the supervisor under who	om you we	ere trained:
I.	 Overview: Check (√) explanation that r this section. 	most closel	y represents your evaluation of
	1. Were intern's responsibilities and☐ Clearly discussed☐ Clear to some extent☐ Not clear	privileges	s discussed with you?
	2. What is your opinion about trainin ☐ Excellent training ☐ Good training ☐ Adequately planned training ☐ Poorly planned training	g for inte	rns in this section?
	3. Do you feel that the responsibilities according to your abilities to hand ☐ The responsibilities given to me well ☐ Some of the responsibilities were and ☐ The responsibilities given to me well	dle them? ere suited above my a	to my ability to handle them. ability to handle them.
	4. Do you feel that you gained maxissection?☐ Yes	mum ben	efits of the training in this

U=N	Not applicable	1 =Poor	2 =Adequate	3 =Al	oove av	erage	4 =Exc	ellen
						ating S	cale	
Α	Committed to		ng program	0	1	2	3	4
В	Supervision o			0	1	2	3	4
С	Encouraging i			0	1	2	3	4
D	Amount of fee	edback give	en to intern	0	1	2	3	4
E	Friendliness to	oward inte	ns' questions	0	1	2	3	4
			4					
1 1;	ist helow the i	netruman	ts/equipments	s vou o	nerate	ad.		
1			2					
			6					
			8					
9			10.	·				
2. L	ist the types o	of tests yo	ou observed bu	ıt did n	ot per	form.		
1			2					
3			4					
5			6					
7			8					
9			10.					
			s or suggestio Please explair		uld you			
t	_							
t Addi	itions:							
Add i	itions:							

 $\hfill\square$ To some extent

	2							
	3							
	Suggestions:							
	1							
	2							
	3							
IV.	Academic/Clinical Correlation:							
	1. Did you find correlation between previously learned theories/concepts (at university) and their practical application during training in this section? If your answer is "no", please explain.							
	□ yes □ no							
	2. What recommendations would you like to make to correlate your learning theories/concepts (at university) with the practical experience during training in this section?							
v.	Intern Signature:							
	Date of rotation: From:To							
	Date of Evaluation:							

Form #5 Internship Monitoring Report

Year	:				
1 st Vi	sit 2 nd Visit 3 rd Visit				
Name	e of the Hospital:				
A:	FEEDBACK FROM HOSPITAL TRAINING COORDINATOR:				
Name of the Hospital Training Coordinator:					
	TERRACIVERONA INTERCUITO INTERNAC				

B: FEEDBACK FROM INTERSHIP INTERNS:

Intern Performance:	Excellent	Very Good	Good	Average	Below average
	90-100	81-90	71-80	60-70	<60
1. Follow hospital rules and regulations.					
2. Punctuality and initiative for work.					
3. Adhere to safety codes.					
4. Exhibit verbal communication skills.					
5. Work as a team member.					
Problems with Interns, if any.					
	•				

Intern Experience:	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
•	5	4	3	2	1
1. The internship is giving me a better understanding of concepts and skills.					
2. I am given level of responsibilities which is consistent with my abilities.					
3. My supervisor is available and accessible when I have questions.					
4. I have regular meeting with my supervisor and receive constructive feedback.					
5. Are you all using UQU internship booklet.	Yes	No			
6. If yes , does this booklet provide you useful guidance for internship?					
7. If not , please state the difficulties.					
8. Any Suggestions:					

C:	PROBLEMS WITH INTE	RNS, IF ANY:	
		·	
Nam	nes of the members of mo	onitoring team and signature:	
Nam	ne:	Signature:	
Nam	ne:	Signature:	
Date	e:		

HOSPITAL COORDINATOR'S FEEDBACK ON UQU INTERNSHIP BOOKLET:

Name of the Hospital					
Hospital Coordinator's impression on	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
UQU internship booklet	5	4	3	2	1
1. Is this hospital using UQU internship booklet for UQU interns?	Yes	No			
If yes, 1.1. This booklet provides useful guidance to interns.					
1.2. It is helping hospital supervisors to be aware of the tasks to be meet by the interns in each discipline.					
1.3. Intern are using UQU internship booklet.					
1.4. Interns experience any difficulty in following internship booklet.					
2. If hospital is not using UQU internship booklet, please state the difficulties.					
Name of the Hospital Training Coordinator:					
Signature:					
Date:		_			
Members Name:					
Members Signatures:					

CONTACTS

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