



HEALTH HOLDING

HAFER ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Clinical Nutrition		
Document:	Policy and Procedure		
Title:	Food and Drug Interaction		
Applies To:	Clinical Dietitians, Nursing, Pharmacists		
Preparation Date:	January 12, 2025	Index No:	CN- MPP-002
Approval Date:	January 26, 2025	Version :	2
Effective Date:	February 26, 2025	Replacement No.:	CN- MPP-002 (2)
Review Date:	February 26, 2028	No. of Pages:	04

1. PURPOSE:

- 1.1 Provide instructions to patients prior to their discharge about their medications, which have significant food and drug interactions and provide them with the appropriate educational materials.

2. DEFINITIONS:

- 2.1 Food-Drug Interaction occurs when the food eaten affects the ingredients in a medicine a patient is taking, so the medicine cannot work the way it should.

3. POLICY:

- 3.1 The responsible staff should monitor the use of medications, which have significant food, and drug-nutrient interaction that requires diet instruction and /or nutrient supplementation.

4. PROCEDURE:

- 4.1 All patients receiving any of the drugs enumerated below shall be instructed on the use of medications, which have significant food, and drug-nutrient interaction that requires diet instruction and /or nutrient supplementation, if applicable.
- 4.2 Individual drugs and procedures /dietary instructions:
- 4.2.1 Coumadin (Warfarin)
- 4.2.1.1 Foods that interact with anticoagulants and will increase the risk of bleeding are garlic, ginger, glucosamine, ginseng, and ginkgo.
- 4.2.1.2 Coumadin may be affected by vitamin K in food because it can make the medicine less effective. Foods high in vitamin K include the leafy green vegetables like broccoli, cabbage, collard greens, spinach, kale, turnip greens, and brussel sprouts. Avoid cranberry juice or cranberry.
- 4.2.2 Dexamethasone and Prednisone are corticosteroids:
- 4.2.2.1 These medications cause mineralocorticoid effects, which include hypernatremia, hypokalaemia, fluid retention, and elevation in blood pressure, hyperglycaemia, and osteoporosis.
- 4.2.2.2 The Patient should avoid excessive sodium and concentrated sweets, and increase potassium and calcium-rich food.
- 4.2.2.3 Avoid intake of the following food:
- 4.2.2.3.1 Olives
- 4.2.2.3.2 Pickles
- 4.2.2.3.3 Salted nuts
- 4.2.2.3.4 Potato chips
- 4.2.2.3.5 White cheese
- 4.2.2.3.6 Canned soups
- 4.2.2.3.7 Salted crackers

- 4.2.2.3.8 Ketchup /Hot sauce
- 4.2.2.3.9 Canned tomato juice
- 4.2.2.3.10 Steak sauce, soy sauce
- 4.2.2.3.11 Maggi cubes or soup mixes
- 4.2.2.3.12 Canned meat or vegetables
- 4.2.2.3.13 Food prepared or cooked with sugar
- 4.2.2.4 Increase intake of the following food:
 - 4.2.2.4.1 Orange
 - 4.2.2.4.2 Banana
 - 4.2.2.4.3 Milk, buttermilk
 - 4.2.2.4.4 Jew's mallow (Moloukia)
 - 4.2.2.4.5 Whole bran bread and cereals
 - 4.2.2.4.6 Glandular meats (i.e. liver, kidney, heart)
- 4.2.3 Cyclosporine:
 - 4.2.3.1 Flavonoid component may increase the serum levels of Cyclosporine.
 - 4.2.3.2 High-fat diet may increase Cyclosporine metabolism.
 - 4.2.3.3 Patients should be instructed to take Cyclosporine with milk or orange juice
 - 4.2.3.4 Foods to avoid:
 - 4.2.3.4.1 Oil
 - 4.2.3.4.2 Nuts
 - 4.2.3.4.3 Ghee
 - 4.2.3.4.4 Gravy
 - 4.2.3.4.5 Butter
 - 4.2.3.4.6 Olives
 - 4.2.3.4.7 Cream
 - 4.2.3.4.8 Avocado
 - 4.2.3.4.9 Margarine
 - 4.2.3.4.10 Mayonnaise
 - 4.2.3.4.11 Cheese spread
 - 4.2.3.4.12 Full cream milk /yogurt/labani
- 4.2.4 Digoxin:
 - 4.2.4.1 It should be Best given half an hour or 2 hours after tube feeding.
 - 4.2.4.2 It should be given 30 minutes to 1 hour before or 4 hours after bran fiber
 - 4.2.4.3 Grapefruit juice may modestly increase the plasma concentrations of digoxin
 - 4.2.4.4 Administration of digoxin with a high-fiber and high-pectin meals has been shown to decrease its bioavailability.
 - 4.2.4.5 Food to avoid: bran fiber, pectin-containing foods such as apples or pears, or fiber containing, bulk-forming laxatives at the same time, black licorice (natural).
- 4.2.5 Acetaminophen:
 - 4.2.5.1 Use of over three grams of vitamin C has been associated with decreased acetaminophen clearance time.
 - 4.2.5.2 Foods high in protein, carbohydrates, pectin and vegetables like broccoli, brussel sprouts, cabbage, etc. can delay/interfere with acetaminophen absorption.
 - 4.2.5.3 Give on an empty stomach. Maybe given with food if GI upset occurs.
- 4.2.6 Albendazole:
 - 4.2.6.1 Given with meals
 - 4.2.6.2 Dietary fat increases the bioavailability
 - 4.2.6.3 Avoid eating grapefruit or drinking grapefruit juice because it increases the amount of albendazole your body absorbs.
- 4.2.7 Alendronate:
 - 4.2.7.1 Any food especially dairy product reduces the absorption.

- 4.2.7.2 Swallow alendronate tablets with a full glass (6 to 8 ounces [180 to 240 mL]) of plain water. Drink at least a quarter of a cup (2 ounces [60 mL]) of plain water after you take alendronate solution.
- 4.2.7.3 Never take alendronate tablets or solution with tea, coffee, juice, milk, mineral water, sparkling water, or any liquid other than plain water.
- 4.2.7.4 After you take alendronate, do not eat, drink, or take any other medications (including vitamins or antacids) for at least 30 minutes.
- 4.2.8 Levothyroxine is a replacement for a hormone normally in thyroid gland:
 - 4.2.8.1 Take levothyroxine once a day in the morning on an empty stomach, at least half an (½) hour to one (1) hour before eating any food.
 - 4.2.8.2 Absorption of levothyroxine may be decreased by foods such as soybean flour, cotton seed meal, walnuts, dietary fiber, calcium product and calcium-fortified juice
- 4.2.9 Tetracycline & fluoroquinolones are antibiotics:
 - 4.2.9.1 Ciprofloxacin :
 - 4.2.9.1.1 Casein and calcium present in milk decrease the absorption of ciprofloxacin.
 - 4.2.9.1.2 Ciprofloxacin (500 mg) tablets can be affected by concomitant ingestion of the Grape Fruit Juice (GFJ)
 - 4.2.9.2 Tetracycline :
 - 4.2.9.2.1 Should be taken one (1) hour before or two (2) hours after meals
 - 4.2.9.2.2 Avoid intake with milk because it binds calcium and iron, forming insoluble chelates, and influencing its bioavailability.
 - 4.2.9.3 Never take alendronate tablets or solution with tea, coffee, juice, milk, mineral water, sparkling water, or any liquid other than plain water.
 - 4.2.7.4 After you take alendronate, do not eat, drink, or take any other medications (including vitamins or antacids) for at least 30 minutes.
- 4.2.10 Theophylline (for Preventing and treating symptoms and blockage of airway due to asthma or other lung diseases)
 - 4.2.10.1 High-fat meals may increase the amount of theophylline in the body.
 - 4.2.10.2 High-carbohydrate meals decrease the amount of theophylline in the body.
 - 4.2.10.3 Avoid eating or drinking large amounts of foods and beverages that contain caffeine (e.g., chocolate, colas, coffee, and tea) because it increases the risk of drug toxicity.
 - 4.2.10.4 Patients may be advised not to consume Grape Fruit Juice (GFJ) when taking theophylline.
- 4.2.11 ACE inhibitor for HTN:
 - 4.2.11.1 ACE inhibitors can increase the amount of potassium in the body.
 - 4.2.11.2 Avoid eating large amounts of foods high in potassium, such as bananas, oranges, green leafy vegetables, and salt substitutes that contain potassium.
- 4.2.12 Iron :
 - 4.2.12.1 Avoid consuming or consume in a small amount for at least 1 hour before or 2 hours after taking the iron supplement because these foods contain inhibitors like calcium, oxalic acid, polyphenols, phytates, and fiber when combined with iron in the body it losses its effectiveness.
 - 4.2.12.1.1 Milk
 - 4.2.12.1.2 Spinach
 - 4.2.12.1.3 Tea or coffee
 - 4.2.12.1.4 Cheese and yogurt
 - 4.2.12.1.5 Whole-grain bread , cereals and bran
- 4.3 If a patient is to be discharged with any of the above medications, the nurse shall notify the clinical dietitian within four (4) hours of the patient discharge to allow Dietitian to review the diet or give supplement to patient . Another patient information sheet shall be given to patient if necessary.

5. MATERIALS AND EQUIPMENT:

- 5.1 Initial Nutritional Assessment Form.
- 5.2 Nutritional Reassessment Form.
- 5.3 Educational materials.

6. RESPONSIBILITIES:

- 6.1 Clinical Dietitians
- 6.2 Pharmacists
- 6.3 Nurses

7. APPENDICES:

N/A

8. REFERENCES:

- 8.1 Central Board for Accreditation of Health Care Institutions (CBAHI) Standards Resource Manual
- 8.2 King Khalid Hospital and Prince Sultan Center for Health Services. DPP-DT- 005- V3
- 8.3 King Saud Medical Complex, APP-KSMC -296 -V1, 2010
- 8.4 A Guide from the National Consumers League and U.S. Food and Drug Administration. Avoid Food-Drug Interactions.
- 8.5 Asian Journal of Pharmaceutical and Clinical Research Vol.2 Issue 4, October.-December. 2009

9. APPROVALS:

	Name	Title	Signature	Date
Prepared by:	Mr. Salah Rasheed Alanazi	Clinical Dietitian		January 12, 2025
Reviewed by:	Mr. Saleh Daraan Alshammri	Head of Clinical Nutrition		January 14, 2025
Reviewed by:	Mr. Mutlaq K. Aldhfeeri	Pharmaceutical Care Director		January 15, 2025
Reviewed by:	Mr. Sabah Turayhib Al - Harbi	Director of Nursing		January 16, 2025
Reviewed by:	Mr. Abdulelah Ayed Al Mutairi	QM&PS Director		January 19, 2025
Reviewed by:	Dr. Tamer Naguib	Medical Director		January 20, 2025
Approved by:	Mr. Fahad Hazam Al - Shammary	Hospital Director		January 26, 2025