



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

March 17, 2020

DEPARTMENT MEMORANDUM

No. 2020 – 0166

TO: ALL UNDERSECRETARIES AND ASSISTANT SECRETARIES OF HEALTH; MINISTER OF HEALTH - BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO (MOH-BARMM); ALL DIRECTORS OF BUREAUS, SERVICES, AND CENTERS FOR HEALTH DEVELOPMENT (CHDs); ALL EXECUTIVE DIRECTORS OF SPECIALTY HOSPITALS; CHIEFS OF MEDICAL CENTERS, HOSPITALS, AND SANITARIA; AND ALL OTHERS CONCERNED

SUBJECT: Interim Guidelines on the Preparation and Handling of Food in Temporary Treatment and Monitoring Facilities for COVID-19 Patients

I. BACKGROUND

In relation to Department of Health (DOH) Department Memorandum No. 2020-0123 *Interim Guidelines on the Management of Surge Capacity through the Conversion of Public Spaces to Operate as Temporary Treatment and Monitoring Facilities for the Management of Persons Under Investigation (PUIs) and Mild Cases of Coronavirus Disease 2019 (COVID-19)*, selected public spaces such as auditoriums, gymnasium, schools, vacant hotels, courts, open fields with tents, and the like may be converted to operate as temporary treatment and monitoring facilities to manage suspect, probable and confirmed COVID-19 cases with mild symptoms.

As such, these facilities shall ensure provision of adequate nutrition through appropriate food quality, quantity, and safety. Hence, the DOH hereby issues these guidelines on food preparation and handling in temporary treatment and monitoring facilities.

II. OBJECTIVE

To provide guidance on the preparation and handling of food for COVID-19 suspect, probable, and confirmed cases of mild COVID-19 and housed in temporary treatment and monitoring facilities operated by the DOH and the Local Government Units (LGUs).

III. SCOPE AND COVERAGE

This issuance shall cover all temporary treatment and monitoring facilities for COVID-19 patients such as auditoriums, gymnasium, schools, vacant hotels, courts, open fields with tents, and the like that are operated by the DOH and the LGUs.

IV. GENERAL GUIDELINES

A. The designated Officer-in-Charge (OIC) of the treatment and monitoring facility for COVID-19 patients shall plan, organize, and implement food-related concerns in the facility. Designed plans shall be appropriate depending on the set-up of treatment and monitoring

- B.** The designated OIC of the DOH- or LGU-operated treatment and monitoring facility for COVID-19 patients shall designate a food preparation and cooking area within the facility.
- C.** A food preparation and cooking area shall have food handlers. The DOH and/or LGU may deploy registered nutritionist-dietitians (RNDs) to lead in meal planning, and certified food safety compliance officers (FSCO) to enforce proper sanitation and food safety procedures to the treatment and monitoring facilities under their supervision.
- D.** A two-week cycle menu shall be made available, if possible. A sample two-week cycle menu in ANNEX D shall serve as a guide/reference.
- E.** All meals for COVID-19 patients shall be prepared at the designated food preparation and cooking area. The area shall be kept clean and sanitized at all times as stated on Section V., (E) of these guidelines.
- F.** Provision of food shall be, at the minimum, simple, easily or locally available, easy to prepare, can satisfy the appetite, provide adequate nutrition, help boost the immune system, can be tolerated by the patients, and are based on their dietary needs
- G.** Patients shall be provided with food items that are high in the following nutrients:
1. **Vitamin C** which is known to help boost the immune system. Some examples are guava, lemon, guyabano, and green leafy vegetables especially *malunggay*, *gabi leaves*, *sili*, *mustasa*, *ampalaya*, peppers, *chicharo* and cauliflower. **Bioflavonoids** are known to help intensify the effect of Vitamin C, with sources including citrus fruits.
 2. **Vitamin A and Beta-carotene** are crucial for maintaining vision, promoting growth and development, and protecting epithelium and mucus integrity in the body. Vitamin A is known for its anti-inflammatory effect because of its critical role in enhancing immune function. It is also a powerful antioxidant which can help fight viruses and infection. Food items rich in vitamin A derived from animals are liver, fish liver oils, butter, and eggs. Dark leafy greens (e.g. *malunggay*, *kamote*, *kangkong*, *pechay*, *kalabasa*, *mustasa*, *sili* or *pepper leaves*, *ahugbati*, *gabi leaves*, *saluyot*, *ampalaya*, and *kulitis*) and rich yellow or deep orange vegetables and fruits (such as carrot, squash, tomato, mango, melon, papaya, yellow *kamote*, and yellow corn) supply vitamin A mainly in the form of carotenoids.
 3. **Vitamin D** regulates the absorption of calcium and phosphorus, and facilitates normal immune system function. Foods that provide vitamin D include fatty fish (e.g. *alumahan*, *dilis*, *tilapia*), beef liver, cheese, egg yolks, shrimp, and other food items fortified with vitamin D such as soy milk, and cereals.
 4. **B-vitamins** can help release energy from food. Most important for immune function are B₆ and B₁₂. Vitamin B₆ serves as an essential cofactor for more than 140 enzymes, most of which are involved in the metabolism of amino acids, with functional roles in growth, immune function, and other aspects of metabolism. Common foods with the highest B₆ content are liver and glandular organs, eggs, pork, fish, poultry, legumes, whole grains, and bran cereals. On the other hand, vitamin B₁₂ is essential for the normal functioning of nerves, bone marrow, and gastrointestinal tract. Beef, liver, and eggs are very good sources of B₁₂.
 5. **Folate** helps make and repair DNA, thus a deficiency of the vitamin could hamper immunity. Along with vitamin B₁₂ and vitamin C, folic acid/folate is essential in erythropoiesis or red blood cell production. Food items with good sources of folate are legumes, leafy green vegetables, eggs, and citrus fruits.
 6. **Zinc** keeps the immune system strong (e.g. helps fight viruses), helps heal wounds, and supports normal growth. Zinc is primarily found in animal foods like milk, meat especially beef, liver, seafood and eggs. It is also abundant in mushrooms, spinach (*kulitis*), sea

vegetables, pumpkin seeds, green peas, nuts, legumes, whole grain cereals, wheat, and bran. Legumes and whole-grain products are good sources of zinc if eaten in large quantities.

7. **Protein** helps prevent muscle deterioration and regulates the body's immune response to viral infections by initiating a chemical signaling cascade that curbs viral spread. Good protein sources include eggs, fish, chicken and meat. Using processed meats for protein sources for anti-inflammatory effects shall be refrained. Consider giving plant-based sources like munggo, tofu, soy milk, beans, lentils, peas, nuts, etc.
 8. **Fats** such as omega-3 fatty acids support a healthy immune system and defend against inflammatory disorders. Good sources include avocado, vegetable oil, coconut oil, and fatty fish (e.g. mackerel, salmon, sardines).
- H.** For patients who have respiratory problems, low carbohydrates in their diet can lessen the necessity for the use of the ventilators and are helpful for patients with difficulty of breathing. Sugar consumption shall be strictly avoided.
- I.** Prebiotics, probiotics and resveratrol are recommended to make the gut healthy by providing food items such as fruits, vegetables, and nuts.
- J.** Give food items which have known anti-inflammatory effects. Include ingredients in the meals such as ginger, turmeric, and onions.
- K.** Beverages such as water, tea, and freshly squeezed fruit juices are recommended.
- L.** There may be some patients who can no longer tolerate solid foods. With this, soupy dishes are encouraged to be served. Medical nutritionals should also be provided if patients can no longer tolerate any food. (See ANNEX A for Sample Menu for Patients Who Can Tolerate Solid Foods; ANNEX B, Sample Menu for Patients Who Cannot Tolerate Solids; and ANNEX C, Sample Menu for Various Situations)
- M.** Daily patient census and food inventory shall be required for food forecasting. The number of health workers and other staff-on-duty shall be included in the census.
- N.** Proper disposal of food wastes/garbage shall be practiced. Segregation and labeling of trash bins shall be observed.
- O.** The treatment and monitoring facilities may outsource food service providers for food preparation and handling services as long as the following requirements are met:
1. Service Contract
 2. Sanitary Permit
 3. Medical certificates of each personnel
 4. Water analysis
 5. Mayor's Permit to Operate

V. SPECIFIC GUIDELINES

A. Set-up of Food Preparation and Cooking Area

1. The following are minimum requirements for setting up food preparation and cooking area:
 - a. Working table
 - b. Gas stove or electric stove
 - c. Refrigerator or cooler
 - d. Cooking utensils

- e. Rice cooker
 - f. Pots and pans
 - g. Pitchers, glasses or disposable cups
 - h. Garbage bins (biodegradable, non-biodegradable, recyclables, infectious)
 - i. Water dispensers
2. Electrical outlets, appliances and gadgets shall be checked or tested prior to use.
 3. Potable water shall be available. If potable water is not available, water supply may be contracted from reliable sources such as, but not limited to, water stations (with DOH certification/permit) near the facility or food handlers may practice water purification through boiling of water.
 4. Possible entry of rodents and cockroaches shall be prevented and managed.

B. Food Preparation

1. Food items shall be purchased directly from an open market.
2. Use of food items that may be prone to food spoilage such as but not limited to heavy creams, milk, or tomatoes shall be avoided.
3. All raw foods shall be cooked thoroughly.
4. Prolonging of holding time from preparation, cooking, and delivery may lead to spoilage. Hence, modification in the sequence and/or method of cooking is recommended. (e.g. cook vegetable dish first then seafood dish; or cooked dishes with tomatoes shall be served at breakfast or lunch; or limit use of heavy creams and/or milk, or serve tomatoes whole not sliced, etc.)
5. Proper temperature and holding time of food shall be observed at all times to avoid food spoilage. Meals shall be served immediately after cooking. Hot foods shall be served hot, and likewise, cold foods shall be served cold. Hot foods are kept in a standard temperature for at least 60°C, whereas cold foods under 4°C. Hot foods can be held without temperature control for up to four hours, whereas cold foods for up to six hours.
6. Food served per day usually contains 1,150 to 1,500 kilocalories (kcal). The standard calorie content shall be 1,800 kcal per day. The following serving portions per meal shall apply:
 - a. Rice and alternatives – limit to 1 cup (160g)
 - b. Vegetable dish – ½ cup (100g)
 - c. Protein – preferably plant-based sources, meat, fish, poultry; 8 servings per kilo (125g raw weight; 80g edible weight)
 - d. Dessert – 1 piece (preferably fruit such as banana, apple, orange)
 - e. Beverage – water and fresh fruit juices
7. Excessive use of salt, oil, and other condiments shall be avoided. Use iodized salt.
8. Proposed meal plans in ANNEXES A, B, and C shall serve as guides for the RND, or assigned Officer-in-Charge in the treatment and monitoring facility.
9. An electric fly catcher at the food preparation, cooking, and dishing area shall be available, if possible, to avoid food being contaminated by flying insects.
10. Flooring in the food preparation and cooking area shall be kept clean and free from oil and other liquids to avoid accidents due to slippery floors.

C. Food Storage

1. Food items shall be properly stored. Perishable items shall be placed in the refrigerator or cooler and non-perishable items in a clean and dry area.
2. All food items shall be cooked based on first-in first-out (FIFO).
3. Expiration of food items shall be checked and monitored.
4. Leftovers must be stored properly and recycled, if possible.

D. Food Handlers

1. The designated OIC of the treatment and monitoring facility shall identify the roles of each food handler (e.g. cook/s, dishwasher/s and servers).
2. Food handlers shall obtain health certification/permit issued by the LGU.
3. Food handlers shall observe proper personal hygiene, safe food handling and serving practices, as follows:
 - a. Hair shall be kept clean and neat with the use of a hair net and cap;
 - b. Proper hand washing with soap and running water for 20 seconds at hand sinks conveniently located in the food preparation and kitchen area:
 - 1) before starting their work;
 - 2) before and after handling food;
 - 3) before and after using the restroom;
 - 4) before and after handling raw meat, poultry and seafood
 - 5) after touching their hair, face or body;
 - 6) after sneezing and/or coughing (with or without a tissue);
 - 7) before eating, drinking or chewing gum, and handling chemicals that might affect food safety;
 - 8) after taking out garbage or clearing tables or bussing dirty dishes;
 - 9) after touching clothing or aprons, handling money, leaving and returning to the kitchen/food preparation area;
 - 10) after handling service animals or aquatic animals, and touching anything else that may contaminate hands;
 - e. An infection control-approved waterless hand rinse (or alcohol-based hand sanitizer) as a hand-washing agent may likewise be used;
 - f. Clean and washable aprons and uniforms shall be worn at all times;
 - g. Clean face towel and handkerchiefs shall be used to wipe the face and arms;
 - h. Smoking and chewing tobacco are strictly prohibited;
 - i. Food handlers/cooks shall wear proper Personal Protective Equipment (PPE). A complete PPE shall consist of hair net/hair cap, mask, apron, gloves, and non-slip shoes.

E. Food Distribution

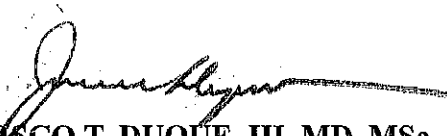
1. Disposable wares and utensils, preferably biodegradable utensils and wares, shall be used for food distribution.
2. The assigned food server shall wear proper PPE and shall serve only up to the room door or entry passage to limit patient encounter. All patients may be instructed to leave soiled disposable wares and utensils outside the room every after meals for collection of the food server.
3. A proper PPE of the assigned food server shall consist of hair net/hair cap, mask, disposable gown, gloves and non-slip shoes. The food server shall discard the PPE properly and practice proper hand washing every after food distribution and collection of soiled disposable wares and utensils.

F. Sanitation and Food Waste Disposal

1. Sanitizing solution (1-part bleach to 99-part water) shall be used for cleaning the food preparation and cooking area and for washing sponges, dishcloths and towels.
2. Disinfecting cooking utensils by boiling in water for 10 minutes shall be done regularly.
3. Food wastes shall be segregated and disposed in color-coded plastic containers or plastic garbage bags as follows:
 - a. Black – for non-infectious dry waste like paper, carton, carbon papers, cans, bottles, plastics, straws and other biodegradable materials

1. Sanitizing solution (1-part bleach to 99-part water) shall be used for cleaning the food preparation and cooking area and for washing sponges, dishcloths and towels.
2. Disinfecting cooking utensils by boiling in water for 10 minutes shall be done regularly.
3. Food wastes shall be segregated and disposed in color-coded plastic containers or plastic garbage bags as follows:
 - a. Black – for non-infectious dry waste like paper, carton, carbon papers, cans, bottles, plastics, straws and other biodegradable materials
 - b. Green – for non-infectious wet waste like leftover and spoiled foods, fruits and vegetable peelings and other perishable foods
 - c. Yellow – for infectious waste like tissue, sanitary napkin, used cotton, gauze, soiled disposable wares and utensils from patient's meals, etc.
4. If color-coded plastic containers or garbage bags are not available, trash bins labelled according to waste segregation shall be used.
5. Garbage containers shall be placed in cool areas near the exit and away from food and shall be disposed regularly.

For strict compliance.


FRANCISCO T. DUQUE, III, MD, MSc
Secretary of Health

ANNEX A. Sample Menu for Patients Who Can Tolerate Solid Food

Days	Breakfast	Lunch	Dinner
1	Chicken Sopas Fruit (available/in season) Tea/Salabat	Tinola with Malunggay Rice Fruit (available/in season) Water	Sautéed Cabbage Soup with chicken meat flakes Rice Fruit (available/in season) Water
2	Arroz Caldo with Boiled Egg Fruit (available/in season) Tea/Salabat	Munggo soup with flaked fish Rice Fruit (available/in season) Water	Bistek na Boneless Bangus with Onions Rice Fruit (available/in season) Water
3	Miswa with Egg Cheese Pandesal Fruit (available/in season) Tea/Salabat	Fried Fish Ginisang Repolyo Rice Fruit (available/in season) Water	Ampalaya with tuna Rice Fruit (available/in season) Water
4	Squash Soup Bread/Pandesal Fruit (available/in season) Tea/Salabat	Sinigang na Boneless Bangus Rice Fruit (available/in season) Water	Fried Alumahan Cucumber salad Rice Fruit (available/in season) Water
5	Cream of Mushroom Soup with egg Bread/Pandesal Fruit (available/in season) Tea/Salabat	Nilagang manok Rice Fruit (available/in season) Water	Sarciadong Isda Rice Fruit (available/in season) Water
6	Omelette with onion and garlic Fried Dilis Fried Rice Fruit (available/in season) Tea/Salabat	Pochero Rice Fruit (available/in season) Water	Sautéed String Beans Chicken Fillet Rice Fruit (available/in season) Water
7	Oatmeal Fruit (available/in season) Tea/Salabat	Pesang Isda Rice Fruit (available/in season) Water	Pork Adobo Rice Fruit (available/in season) Water

ANNEX B. Sample Menu for Patients Who Can Only Tolerate Soft Diet. (Might need to be supported by Medical Nutritionals)

Days	Breakfast	Lunch	Dinner
1	Cream of mushroom soup Water/Fruit Juice/Salabat	Spinach (Kolitits) soup Water/Fruit Juice	Tinola soup with Malunggay Water/Fruit Juice
2	Arroz caldo Water/ Fruit Juice/Salabat	Munggo soup Water/Fruit Juice	Squash soup Water/Fruit Juice
3	Miswa with Egg Water/ Fruit Juice/Salabat	Veggie soup Water/Fruit Juice	Cream of Corn soup Water/Fruit Juice
4	Squash Soup Water/ Fruit Juice/Salabat	Tinola soup with malunggay Water/Fruit Juice	Lugao Water/Fruit Juice
5	Chicken Soup Water/Fruit Juice	Munggo soup Water/Fruit Juice	Spinach (Kulitis) soup Water/ Fruit Juice/ Salabat
6	Oatmeal Water/ Fruit Juice /Salabat	Veggie soup Water/Fruit Juice	Squash soup Water/Fruit Juice
7	Lugao Water/ Fruit Juice /Salabat	Tinola soup with malunggay Water/Fruit Juice	Corn soup Water/Fruit Juice

ANNEX C. Sample Menu for Various Situations (Sample Survival Kit)

Situation	Breakfast	Lunch	Supper	Snack
<i>No fuel, No water</i>	Bottled fruit juice Crackers/Biscuits	Bottled fruit juice Canned pork & beans Crackers	Canned vegetables Sardines Crackers/buns Bottled fruit juice	Biscuits Bottled fruit juice
<i>Fuel available, No water</i>	Bottled fruit juice Bread, if available or crackers/biscuits	Canned vegetables Sautéed corned beef Buns Bottled fruit juice	Sautéed tuna Bread with margarine Bottled fruit juice	Biscuits Bottled fruit juice
<i>Water available, No fuel</i>	Bottled water Biscuits	Canned soup Luncheon meat Bread Candies	Canned vegetables Canned tuna Bread Bottled water	Bread with liver spread, if available or Biscuits Bottled water
<i>Water and fuel available</i>	Champorado Fried fish Bottled water	Noodle Soup Chicken Adobo Rice Fruit cocktail	Pork Nilaga Rice Banana or canned fruit	Bread/ margarine Bottled water

NOTE: Menu variations may vary depending on the availability of food supplies in the area.

ANNEX D. Sample Two-Week Cycle Menu

DAY 1				
BREAKFAST	MORNING SNACKS	LUNCH	AFTERNOON SNACKS	DINNER
Fruit (available/in season) Boiled Egg Fried Daing na Bangus Rice Coffee / Choco	Biscuit Water	Fried Fish Chopsuey Rice Fruit (available/in season)	Cookies Water	Chicken Adobo Ginisang Repolyo Rice Fruit (available/in season)
DAY 2				
Fruit (available/in season) Boiled egg Fried Chicken Rice Coffee / Choco	Pandesal with Cheese Water	Fried Porkchop Sauteed Carrots and Sayote Rice Fruit (available/in season)	Biscuit Water	Fried Tilapia Cucumber Salad Rice Fruit (available/in season)
DAY 3				
Fruit (available/in season) Salted Egg Fried Dilis Tomatoes Rice Coffee / Choco	Cheese roll Water	Fried Tilapia Sauteed Pechay Rice Fruit (available/in season)	Cookies Water	Chicken Tinola with Pechay and Sayote Rice Fruit (available/in season)
DAY 4				
Fruit (available/in season) Boiled Egg Fried Bangus Rice Coffee / Choco	Pandelimon with cheese water	Pork Bistek Ginisang Repolyo Rice Fruit (available/in season)	Ensaymada Water	Adobong Baboy Sauteed Sayote and Carrots Rice Fruit (available/in season)
DAY 5				
Fruit (available/in season) Boiled Egg Fried Galunggong Rice Coffee / Choco	Biscuit Water	Beef Steak Chopsuey Rice Fruit (available/in season)	Cheese roll Water	Paksiw na Bangus with Talong and Ampalaya Rice Fruit (available/in season)
DAY 6				
Fruit (available/in season) Potato Omelet Pork Adobo Rice Coffee/Choco	Pandesal with spread Water	Fried Chicken Sauteed Baguio Beans Rice Fruit (available/in season)	Banana Cue Water	Pesang Tilapia with Pechay Rice Fruit (available/in season)
DAY 7				
Fruit (available/in season) Scrambled Egg Breaded Porkchop Rice Coffee / Choco	Cookies Water	Paksiw na Bangus with Talong and Ampalaya Rice Fruit (available/in season)	Turon Water	Fried Tilapia Ampalaya Sauté Rice Fruit (available/in season)

BREAKFAST	MORNING SNACKS	LUNCH	AFTERNOON SNACKS	DINNER
DAY 8				
Fruit (available/in season) Boiled Egg Adobo chicken flakes Rice Coffee / Choco	Pandesal with cheese Water	Fried Fish Adobong Kangkong Rice Fruit (available/in season)	Kamote Cue Water	Fried Chicken Sayote-Carrots Sauté Rice Fruit (available/in season)
DAY 9				
Fruit (available/in season) Scrambled Egg with Tomatoes Fried Tinapa Rice Coffee / Choco	Cookies Water	Pork Bistek Chopsuey Rice Fruit (available/in season)	Biscuit Water	Chicken Adobo Pickled Vegetables Rice Fruit (available/in season)
DAY 10				
Fruit (available/in season) Tortang Talong with Pork Giniling Boiled Egg Tomatoes Rice Coffee / Choco	Pandesal with spread Water	Tokwa't Baboy Squash-Patola Sauté Rice Fruit (available/in season)	Chicken Arroz Caldo Water	Fried Galunggong Ginisang Pechay Rice Fruit (available/in season)
DAY 11				
Fruit (available/in season) Paksiw na Bangus Fried Rice Coffee / Choco	Enzaymada Water	Pork Giniling with Egg Rice Fruit (available/in season)	Cheese Roll Water	Chicken Upo Sauté Rice Fruit (available/in season)
DAY 12				
Fruit (available/in season) Spanish Omelet Tuyo and Tomatoes Rice Coffee / Choco	Cupcake Water	Pork Asado Pinakbet Rice Fruit (available/in season)	Maruya Water	Fried Daing na Bangus Sayote-Carrots Sauté Rice Fruit (available/in season)
DAY 13				
Fruit (available/in season) Scrambled Egg Salmon Rice Coffee / Choco	Adobo Roll Water	Pork Nilaga Chop Suey Rice Fruit (available/in season)	Cookies Water	Chicken Tinola with pechay and sayote Rice Fruit (available/in season)
Day 14				
Fruit (available/in season) Boiled Egg Chicken Adobo Rice Coffee / Choco	Cookies Water	Fried Chicken Sautéed Upo Rice Fruit (available/in season)	Asado Roll Water	Fried Tilapia Adobong Sitaw Rice Fruit (available/in season)