### **FOOD AND NUTRITION:**

# Q. What is the scientific basis for any role of diet and nutrition in influencing the transmission of Corona Virus (CV) infection?

An: Generally, malnutrition can make a person more susceptible to infection, and infection also contributes to malnutrition, which causes a vicious cycle. Undernutrition – in all forms – weakens the immune system, which puts these individuals at a higher risk for infections. The relationship between nutrition and risk of disease and death from infections has been demonstrated previously in many studies of other common illnesses (e.g. measles, diarrhea).

# Q. What is the scientific basis for any role of diet and nutrition in influencing the outcome of CV infection?

An: A balanced diet – one that provides all nutrients required at any specific age and life stage – rich in fruit and vegetables, protein foods and whole grains along with drinking plenty of water will help to ensure the immune system functions properly. An adequate nutrition and keeping hydrated is needed for all cells to function optimally, including cells in the immune system. Adopt healthy lifestyle habits (e.g. moderate exercise, not smoking, adequate sleep, managing stress etc.). Likewise, over-nutrition and obesity can be a risk factor for a more serious course of the disease.

### Q. Can food brought home be a primary source of CV infection

An. The virus is transmitted primarily by people who are infected through coughing and sneezing droplets which are then picked up by another person and there is no evidence that COVID-19 can be transmitted by food. The best way to prevent COVID-19 is to adopt good hygiene habits. It is always good to rinse fresh fruit and vegetables with water to remove dirt, debris & pesticides, and reduce levels of foodborne germs and wash your hands after unpacking groceries, before cooking, and before eating to minimize your risk of exposure.

#### Q. Can COVID-19 be transmitted through food consumption

An. Currently there is no evidence to support transmission of COVID-19 associated with food. Experiences from previous outbreaks of related coronaviruses show that transmission through food consumption did not occur. Coronaviruses cannot multiply in food; they need a live animal or human host to multiply.

# Q. What is the role of food and nutrition in building morale and enhancing quality of life amidst COVID pandemic

An. Eat nutritious foods including fruit, vegetables, pulses that contain lots of vitamins, minerals, and antioxidants that nourish the brain and protects it from oxidative stress. Drink plenty of clean water. Keep hydrated. Balanced dietary patterns have been uniquely associated with a lower risk of depression or depressive symptoms.

### Q. Precautions to be taken for preparing/cooking food to prevent transmission COVID-19

An. Continue usual food hygiene and safety practices in all circumstances. Coronaviruses are susceptible to normal cooking temperatures (70°C). Therefore, as a general rule, the consumption of raw or undercooked animal products should be avoided. Following are some of best practices.

- 1- Keep clean
- Wash your hands before handling food and often during food preparation
- Wash your hands after going to the toilet
- Wash and sanitize all surfaces and equipment used for food preparation
- Protect kitchen areas and food from insects, pests and other animals.

- 2- Separate raw and cooked
- Separate raw meat, poultry and seafood from other foods
- Use separate equipment and utensils such as knives and cutting boards for handling raw foods
- Store food in containers to avoid contact between raw and prepared foods
- 3- Cook thoroughly
- Cook food thoroughly, especially meat, poultry, eggs and seafood
- Bring foods like soups and stews to boiling to make sure that they have reached 70°C. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer
- Reheat cooked food thoroughly
- 4- Keep food at safe temperatures
- Do not leave cooked food at room temperature for more than 2 hours
- Refrigerate promptly all cooked and perishable food (preferably below 5°C)
- Keep cooked food piping hot (more than 60°C) prior to serving.
- Do not store food too long even in the refrigerator
- Do not thaw frozen food at room temperature
- 5- Use safe water and raw materials
- Use safe water or treat it to make it safe
- Select fresh and wholesome foods
- Choose foods processed for safety, such as pasteurized milk
- Wash fruits and vegetables, especially if eaten raw
- Do not use food beyond its expiry date

Coronaviruses are thermos-labile, which means that they are susceptible to normal cooking temperatures (70°C). Therefore, as a general rule, the consumption of raw or undercooked animal products should be avoided. Raw meat, raw milk or raw animal organs should be handled with care to avoid cross-contamination with uncooked foods.

### **BREAST FEEDING:**

#### Q. Can COVID-19 be passed through breastfeeding?

An. The COVID-19 virus has not, to date, been detected in the breastmilk of any mother with confirmed/suspected COVID-19. It appears unlikely, therefore, that COVID-19 would be transmitted through breastfeeding or by giving breastmilk that has been expressed by a mother who is confirmed/suspected to have COVID-19. Researchers continue to test breastmilk from mothers with confirmed/suspected COVID-19.

### Q. Should mothers breastfeed in communities where COVID-19 is prevalent?

An. Yes. In all socio-economic settings, breastfeeding improves survival and provides lifelong health and development advantages to newborns and infants. Breastfeeding also improves the health of mothers. In contrast, transmission of COVID-19 through breastmilk and breastfeeding has not been detected. There is no reason to avoid or stop breastfeeding.

# Q. Should a baby still be immediately placed skin-to-skin and breastfed following delivery if the mother is confirmed/suspected to have COVID-19?

An. Yes. Immediate and continued skin-to-skin care, including kangaroo mother care, improves thermal regulation of newborns and several other physiological outcomes, and is associated with reduced neonatal mortality. Placing the newborn close to the mother also enables early initiation of

breastfeeding which also reduces neonatal mortality. The numerous benefits of skin-to-skin contact and breastfeeding substantially outweigh the potential risks of transmission and illness associated with COVID-19.

#### Q. If a mother is confirmed/suspected to have COVID-19, should she continue breastfeeding?

An. Yes. The transmission of the COVID-19 virus through breastmilk and breastfeeding has not been detected. While breastfeeding, a mother should still implement appropriate hygiene/ IPC measures, including wearing a medical mask if available, to reduce the possibility of droplets with COVID-19 being spread to her infant.

In contrast, there is high quality evidence showing that breastfeeding reduces neonatal, infant and child mortality including in high resource settings and improves lifelong health and development in all geographies and economic settings.

# Q. If a mother confirmed/suspected to have COVID-19 does not have a medical face mask should she still breastfeed?

An. Yes. Breastfeeding unquestionably reduces neonatal and infant mortality and provides numerous lifelong health and brain development advantages to the infant/child. Mothers with symptoms of COVID-19 are advised to wear a medical mask, but even if this is not possible, breastfeeding should be continued. Non-medical masks (e.g. home-made or cloth masks) have not been evaluated but are effective to some extent and are better than no mask. Covering of nose and mouth with "Abaya/Naqab" is also beneficial. Other infection prevention measures, such as washing hands, cleaning surfaces, sneezing or coughing into a tissue are also important.

# Q. If a mother confirmed/suspected to have COVID-19 is not able to breastfeed what is the best way to feed her newborn/infant?

An. The best alternatives to breastfeeding a newborn or young infant are:

*Expressed breastmilk*: Expression of breastmilk is primarily done or taught through hand expression, with the use of a mechanical pump only when necessary. Hand expression and using a pump can be equally effective.

Donor human milk: If the mother is unable to express milk and milk is available from a human milk bank, donor human milk can be fed to the baby while the mother is recovering.

Wet Nursing: If expressing breastmilk or donor human milk are not feasible or available then consider wet nursing OR Infant formula milk with measures to ensure that it is feasible, correctly prepared, safe and sustainable

### Q. Is it safe to give expressed breastmilk from a mother confirmed/suspected to have COVID-19?

An. Yes. The COVID-19 virus has not, to date, been detected in the breastmilk of any mother confirmed/suspected to have COVID-19. It is unlikely that the virus can be transmitted by giving breastmilk that has been expressed by a mother with confirmed/suspected COVID-19.

# Q. If a mother with confirmed/suspected COVID-19 is expressing her milk for her baby, are there extra measures needed when handling the breastmilk pump, milk storage containers or feeding utensils?

An. Even when COVID-19 is not a consideration, breastmilk pumps, milk storage containers and feeding utensils need to be appropriately cleaned after every use.

• Wash the pump/containers after every use with liquid soap, e.g. dishwashing liquid and warm water. Rinse after with hot water for 10-15 seconds.

Q. If a mother confirmed/suspected to have COVID-19 was unable to breastfeed because she was too ill or because of another illness, when can she start to breastfeed again?

An. A mother can start to breastfeed when she feels well enough to do so. There is no fixed time interval to wait after confirmed/suspected COVID-19. There is no evidence that breastfeeding changes the clinical course of COVID-19 in a mother. She should be supported in her general health and nutrition to ensure full recovery. She should also be supported to initiate breastfeeding or re-lactate.

### **NUTRITION FOR ADULTS DURING COVID-19**

### Q. What is Nutrition advice for adults during the COVID-19?

An. Eat a well-balanced and wholesome diet every day to get the vitamins, minerals, dietary fiber, protein and antioxidants for a stronger immune system and to lower your risk of chronic illness and infectious diseases.

Avoid sugar, fat and salt to significantly lower your risk of overweight, obesity, heart disease, stroke, diabetes and certain types of cancer.

Do not overcook vegetables and fruit as this can lead to the loss of important vitamins.

### Q. What should adult eat daily for improving nutrition during COVID-19?

An. Eat fruits, vegetables, legumes (e.g. lentils, beans), nuts and whole grains (e.g. unprocessed maize, millet, oats, wheat, brown rice or starchy tubers or roots such as potato, yam, taro or cassava), and foods from animal sources (e.g. meat, fish, eggs and milk).

### Q. How much water should adult Drink every day?

An. Drink 8–10 glass of water every day.

#### Q. What should I avoid during COVID-19?

An. Eat at home to reduce your rate of contact with other people and lower your chance of being exposed to COVID-19.

Avoid close contact with people and maintain a distance of at least 1 meter between yourself and others. Especially avoid close contact with people who are coughing or sneezing.

Avoid touching your face and eyes. Avoid touching any surfaces unnecessarily.

### Q. What type of fat and oil we can use during COVID-19?

An. Consume unsaturated fats (e.g. found in fish, avocado, nuts, olive oil, soy, canola, sunflower and corn oils) rather than saturated fats (e.g. found in fatty meat, butter, coconut oil, cream, cheese, ghee and lard).

### Q. Can I eat salt and sugar during COVID-19?

An. Limit the amount of salt (not more than 1 teaspoon) and high-sodium condiments (e.g. soy sauce and fish sauce).

Limit the intake of sugar in any form (soft drinks or sodas and other drinks that are high in sugar). Choose fresh fruits instead of sweet snacks such as cookies, cakes and chocolate.

#### Q. What nutrition should be avoided during COVID-19?

An. Avoid too much caffeine, and sweetened fruit juices, syrups, fruit juice concentrates, fizzy and still drinks as they all contain sugar.