

COVID-19 LOCKDOWN: MEASURES ON FOOD CHOICES AND DIETARY DIVERSITY IN NIGERIA

BY

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Abstract

Coronavirus actually refers to a large family of viruses which can cause illnesses in human and many animals. Some of these illnesses are rare but severe respiratory infections, including Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and, as most recently discovered. This paper discussed covid-19 lockdown measures on food choices and dietary diversity in Nigeria. The paper further discussed the concept of covid-19 pandemic, concept of lockdown, food choices, dietary diversity, Impact of Lockdown on Food Choices, Barriers to food choices and dietary diversity and Covid-19 Lockdown Measures on Food Choices and Dietary Diversity. The paper concluded that eating as healthily as possible is important not only for physical health, but also for psychological well-being. This paper further recommended that drinking an adequate amount of fluid is essential for health and immune systems. Adding fruits or vegetables like lemon, lime, cucumber slices or berries to water is a great way to add an extra twist of flavour.

Keywords: Covid-19, Dietary Diversity, Food choices, Lockdown

Introduction

Coronavirus disease (COVID-19) is an infectious disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.' The virus and disease were first detected in Wuhan, China on December 31, 2019, and, as of the beginning of March 2020, have led to an outbreak in over 60 countries across the globe, including the United States of America (USA). While the coronavirus disease is popularly *referred to as just coronavirus*, *coronavirus* actually refers to a large family of viruses which can cause illnesses in human and many animals. Some of these illnesses are rare but severe respiratory infections, including Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and, as most recently discovered, *COVID-19* (Clarke, 2019).

On February 11, 2020, the World Health Organization (WHO) officially named this novel coronavirus *COVID-19*. *COVID* is short for *coronavirus disease*. The number 19 refers to the fact that the disease was first detected in 2019, though the outbreak occurred in 2020. Novel coronavirus can be abbreviated as nCoV. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness (Clarke, 2019).

The WHO has officially classified the coronavirus outbreak as a pandemic, which it defines as “a worldwide spread of a new disease.” The US government has declared a public health emergency. So far, *COVID-19* has caused over 230,000 deaths, and over 3,300,000 cases have been confirmed around the world. Efforts to contain the spread of COVID-19 include social distancing, a term for measures (such as avoiding mass gatherings) taken to reduce close contact between people (Clarke, 2019). The term lockdown or shutdown is being used by many to describe more general and widespread restrictions on movement, work and travel on all people in a city, region or country. A lockdown is a requirement for people to stay where they are, usually due to specific risks to themselves or to others if they can move freely. The term "stay-at-home" is often used for lockdowns that affect an area, rather than specific locations. The term is used for a prison protocol that usually prevents people, information or objects from

leaving an area. The protocol can usually only be initiated by someone in a position of authority (Cox, 2014).

A lockdown can also be used to protect people inside a facility or, for example, a computing system, from a threat or other external event. In buildings doors leading outside are usually locked so that no person may enter or exit. A full lockdown usually means that people must stay where they are and may not enter or exit a building or rooms within it, needing to go to the nearest place designated safe if not already in such a place. A drill lockdown may be held in the absence of a threat, to familiarise people with what they must do (Cox, 2014). Food choice refers to how people decide on what to buy and eat. A complex set of factors that vary from person to person and depend on culture, heritage and up-bringing all influence food choice. Food choice can also be influenced by other characteristics that correspond to personal preferences (e.g., sustainability labels for fair trade, organic labels or health-related information such as health claims). Further personal factors influencing food choice can be habits (“I always buy this”) or taste. It can also depend on the mood and other factors such as appetite or being in a rush (Devine, 2009). Dietary diversity is a qualitative measure of food consumption that shows nutrient adequacy of the diet of individuals and households. Considering that, over 40 nutrients are needed in the human diet for best nutrition and well-being, a different combination of foods from various food groups is required to help meet individual nutritional requirements and promote good health. Measuring dietary diversity has been found as a useful tool for the rapid assessment of food security and nutritional status in low-income settings. Increasing dietary diversity is a proven intervention that improves nutrient adequacy in children aged 6 months to 2 years.

Nutrient-rich foods from different diets are essential elements in child feeding that support dietary needs and adequate growth during their early years of life. Dietary diversity has been established as a significant predictor of growth. Intake of a diverse variety of foods has been a recommendation for achieving adequate nutrient intake, and the advice appears in the dietary guidelines of many countries (Devine, 2009).

Impact of Lockdown on Food Choices

The COVID-19 pandemic affects the global food industry as governments close down restaurants and bars to slow the spread of the virus. Across the world, restaurants' daily traffic dropped precipitously compared to the same period in 2019. Closures of restaurants caused a ripple effect among related industries such as food production, food and beverage shipping, fishing, and farming. According to the United Nations Food and Agricultural Organisation, currently, some 820 million people around the world are experiencing chronic hunger - not eating enough caloric energy to live normal lives (Berkman, 2019). Blockages to transport routes are particularly obstructive for fresh food supply chains and may also result in increased levels of food loss and waste. Fresh fish and aquatic products, which are highly perishable and therefore need to be sold, processed or stored in a relatively limited time, are at particular risk. Also, shortages of labour could disrupt production and processing of food, notably for labour-intensive industries. Transport restrictions and quarantine measures now in place in many places impede farmers' access to markets, curbing their productive capacities and hindering them from selling their produce (Becker, 2008).

Barriers to food choices and dietary diversity

Focus on food, education and time constraints are seen as barriers to food choices and dietary diversity. The following barriers are discussed below:

(a) Focus on cost: Household income and the cost of food is an important factor influencing food choice, especially for low-income consumers. The potential for food wastage leads to a reluctance to try ‘new’ foods for fear the family will reject them. In addition, a lack of knowledge and the loss of cooking skills can also inhibit buying and preparing meals from basic ingredients (Gatenby, 2006).

There is no doubt that the cost of food is a primary determinant of food choice. Whether cost is prohibitive depends fundamentally on a person's income and socio-economic status. Low-income groups have a greater tendency to consume unbalanced diets and in particular have low intakes of fruit and vegetables (Horwath, 2009).

(b) Education: Education on how to increase fruit and vegetable consumption in an affordable way such that no further expense, in money or effort, is incurred has been proposed as a solution. Efforts of governments, public health authorities, producers and retailers to promote fruit and vegetable dishes as value for money could also make a positive contribution to dietary change (Becker, 2008). Studies indicate that the level of education can influence dietary behaviour during adulthood. In contrast, nutrition knowledge and good dietary habits are not strongly correlated. This is because knowledge about health does not lead to direct action when individuals are unsure how to apply their knowledge. Furthermore, information disseminated on nutrition comes from a variety of sources and is viewed as conflicting or is mistrusted, which discourages motivation to change¹⁵. Thus, it is important to convey accurate and consistent messages through various media, on food packages and of course via health professionals (Horwath, 2009).

(c) Time constraints: Lack of time is frequently mentioned for not following nutritional advice, particularly by the young and well educated people living alone or cooking for one seek out convenience foods rather than cooking from basic ingredients. This need has been met with a shift in the fruit and vegetables market from loose to prepacked, prepared and ready-to-cook products. These products are more expensive than loose products but people are willing to pay the extra cost because of the convenience they bring. Developing a greater range of tasty, convenient foods with good nutritional profiles offers a route to improving the diet quality of these groups (Ajzen, 2008).

Covid-19 Lockdown Measures on Food Choices and Dietary Diversity

However, eating as healthily as possible is important not only for physical health, but also for psychological well-being. A healthy diet has been shown to reduce the risk of chronic illnesses such as cardiovascular disease, diabetes and obesity, as well as depression and anxiety. The COVID-19 pandemic fast-tracked the food transformation. The closing of borders, shortage of truck drivers and migrant workers, and lockdown of out-of-home channel are posing immediate challenges to the highly globalised food sector and thus to food supply itself (Anderson, 2020).

(a) COVID-19's impact on the food system: Rosenstok (2006) observed that global consumer preferences are changing under the influence of COVID-19. People are becoming more health-conscious and spending more time in their own kitchens. The coronavirus has added a lot of fuel to the already growing demand for fresh, healthy, additive-free food with traceable origins. Horwath (2009) stated that another trend that is here to stay is food e-commerce which has only a small percentage but growing very strongly during the home quarantine and temporary lock-down measures

(b) Personalised nutrition: Devine (2009) observed that consumers are looking for food products that suit their particular lifestyle and the life phase they are in. In response and for example, companies are focusing on alternative proteins to replace meat. Also they produce special products adapted to the nutritional needs of children, elderly and athletes. Gatenby (2006) stated that personalised nutrition accelerates the cross-over between food, technology and big data. One company we work with has developed a nutrition advice app, currently being used by top athletes to help them make informed nutrition choices. COVID-19 affects personalised nutrition, as the pandemic has been hitting people with pre-existing health conditions, such as diabetes and obesity.

(c) Responsible production and waste: One sore issue in this pandemic is food waste. In countries where a lockdown is in place, waste is currently at an all-time high due to the fact that restaurants, hotels and schools are closed, forcing many farms to destroy tonnes of fresh goods that they can no longer sell (Ajzen, 2008).

(d) Food Industry: According to Becker (2008), megatrend is about the digitisation of the entire food value chain. New digital technologies - artificial intelligence, smart data, blockchain, robotisation and precision farming to name a few - present companies with exciting opportunities to boost their

productivity and reduce their costs. Baranowski (2019) stated that digital farming is a combination of digital technology assets - data collection, data storage and management, analytics, and decision modeling - that work together to unlock farming's potential. E.g. our client helps growers to make better decisions that will lead to optimal operations and productivity improvements. In short, they turn data and information into actionable decisions for their retailer and grower customers, all the while ensuring confidentiality.

(e)Ecosystem orchestration: Clarke (2019) observed that covid-19 provides momentum for food ecosystem collaboration, as the pandemic is resulting in food shortages, higher food prices, and inability to fulfill consumer demand of certain consumer segments such as elderly and hospital staff. An illustration of this ecosystem collaboration is one where competitor food retailers are working together to deliver shopping to hospital workers or quick service restaurant employees temporary being staffed to food retailers.

Conclusion

Active infections nationwide today are about 35 times higher than at the start of lockdown. Although this is much less than what would have been the case without lockdown, it is nevertheless a large pool of active infection. It means that any sudden return to pre-lockdown conditions could allow numbers to rapidly increase. In the most optimistic scenarios, active cases are currently reaching a plateau and will soon slowly descend. But these scenarios assume no easing of measures and consider it more likely that peak is still some way off nationally. The most dramatic lockdown mistake was to bar people from returning home at a point when disease levels were low and any resulting spread could have been quite easily contained. Eating as healthily as possible is important not only for physical health, but also for psychological well-being. A healthy diet has been shown to reduce the risk of chronic illnesses such as cardiovascular disease, diabetes and obesity, as well as depression and anxiety.

Recommendations

To help make sure that a balanced diet is maintained during lockdown, here are a few recommendations on how to make healthy food choices and dietary diversity during these challenging times:

1. One of the cornerstones of healthy eating is meal planning. It is best to plan meals a few days or a week in advance and try to involve family members in food preparation. Planning meals will prevent the frustration of deciding every day what to prepare. It will also help to go shopping with a shopping list and saving money.
2. Variety is key to a healthy diet. Avoid omitting any food groups while on lockdown, unless you have a medical reason to do so. The emphasis should be placed on nutrients that support your immune system during this time, including vitamin A, C, and zinc.
3. Purchasing, storing and cooking fresh vegetables can be challenging during lockdown. Appropriate meal planning can guide shopping for fresh fruit and vegetables. Fruit and vegetables can also be frozen to limit the trips to the grocery store. Use fresh vegetables in dishes such as stews that can be frozen for later. Frozen fruits such as bananas and berries can be used for smoothies. Also consider dried or tinned fruit and vegetables.
4. When planning snacks, pair a protein source with a fruit or a grain, for example an apple and nuts, a whole-wheat cracker with cheese, yoghurt with a banana, whole-wheat bread with peanut butter, or even hummus and carrots.
5. Canned oily fish is a really handy item to have in your cupboard while on lockdown. Not only is it an affordable protein source with a long shelf life, but it is rich in omega-3, which can assist in well-being.
6. Nut butters, e.g. peanut butter, are loaded with good fats and will stand the test of time in the cupboard. Include more good fats into your diet.
7. Drinking an adequate amount of fluid is essential for our health and immune systems. Adding fruits or vegetables like lemon, lime, cucumber slices or berries to water is a great way to add an extra twist of flavour.

8. Plan a good breakfast within an hour of waking up, and then plan meals and/or snacks with regular intervals, e.g. three hours apart. Be disciplined and mindful while eating. That way, your body will adapt to a routine and hunger pangs will be predictable and easy to handle.

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