School Feeding Programme
Menus and Protocols

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## Preface

Every society has a duty and obligation to care for its most vulnerable members.
The Government of Belize and the Ministry of Education, Culture, Science and Technology take this responsibility seriously. Food and Education are basic, fundamental rights. The National Healthy Start Feeding Programme is a National commitment of PLANBELIZE to ensure that our students in vulnerable and rural communities have an opportunity to get a healthy meal while at school. No child's physical, emotional or academic development should be limited or compromised because of a lack of Food. School Hunger is a reality for too many of our students. Working together with our many Ministry, Social, Bilateral and Multilateral Partners, Belize is determined to put an end to Hunger in Schools.

This Manual helps us to advance and achieve this goal.


Hon. Francis Fonseca
Minister of Education, Culture, Science and Technology of Belize

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## School Feeding Programme

# Menus 


NATIONAL
HEALTHY START SCHOOL FEEDING

## Programme Menus

The purpose of school feeding programmes is to guarantee the human right to food by providing healthy and nutritious meals to children. It has been established that children's attendance and performance is negatively impacted when they do not receive an adequate breakfast or lunch meal. The nutritional status of a child can also be affected when there is a deficiency or excess of intake of macro and micronutrients, resulting in protein-energy malnutrition or obesity. On the other hand, children that receive a balanced meal at school can achieve an adequate nutritional status, improve class performance and cognitive skills. Childhood is the best stage of life to encourage children to practice and adopt healthier eating habits.

The school feeding programme menus require the establishment of appropriate nutritional standards to guarantee a sufficient intake of calories, protein, carbohydrates, fats, vitamins, and minerals. The Food Based Dietary Guidelines of Belize was used as a guide to promote healthy eating, as well as the National Menus for School Feeding Programme:

1. Choose different types of foods from all the groups daily.
2. Eat more of different types of local fruits daily.
3. Eat more vegetables daily. Choose different types.
4. Choose to eat whole grain and ground foods more frequently.
5. Limit your intake of fats, sugar, and salt.
6. Use natural seasonings in food preparation and cooking.
7. Practice good hygiene when buying, storing, preparing, and cooking foods.


The PAHO guidelines "Recommended nutrient intakes and population nutrient intake goals for the Caribbean" and FAOMHO/UNU Expert Consultation "Human Energy requirements" were also sources used to establish daily nutritional requirements for children. Additional resources were obtained from "Child and Adult Care Food Program: Aligning Dietary Guidance for All".

## Characteristics of School Feeding Menus

1. A cyclic menu of 10 days was elaborated for breakfast and 20 days for lunch, with additional options for snacks.
2. Meals will be offered from Monday to Thursday, which are the current school days.
3. An average of nutrient requirements from age range 9 to 13 was used to calculate school menus.
4. Each breakfast meal provides $22 \%$ of the daily recommended intake, $32 \%$ lunch and 7\% snack.
5. Carbohydrates accounted for $55 \%$ of the total recommended daily intake, with less than $10 \%$ from simple sugars.
6. Fats accounted for $30 \%$ of the total caloric intake, with less than $10 \%$ saturated fat and less than $1 \%$ trans fats.

|  | PROTEIN | CARBOHYDRATES | LIPIDS |
| :--- | :--- | :--- | :--- |
| Percentage <br> Distribution | $15 \%$ | $55 \%$ | $30 \%$ |

7. Protein intake is $15 \%$, promoting the intake of both plant and animal protein.
8. Micronutrients that were considered essential during childhood are as follows: Vitamin A, Vitamin C, Vitamin D, Calcium, Iron, Sodium, Zinc, and Magnesium.
9. A minimum amount of salt, sugar and oil was included in the preparation of foods.
10. A variety of different food groups were included in each menu: vegetables, fruits, staples, animal products, legumes, and dairy.
11. Vegetarian and lactose-free options were included.
12. Salad recipes were created to promote the consumption of fresh vegetables.
13. Meals included natural juices with the option of water on alternative days.
14. Breakfast meals include fresh fruit to boost vitamin and mineral intake.
15. Portions were established to achieve adequate daily intake.
16. A calendar was elaborated to allow the cooks to rotate the menus each month.
17. All recipes were standardised to feed 50 children to facilitate the preparation of each meal. Each recipe card contains the instructions for preparation.

Daily Recommended Macronutrient Distribution for Children

Daily Macronutrient and Fibre requirements for children by different age group and gender
*F - Females *M - Males

Daily recommended intake of important micronutrients for children by age group and gender

| ENERGY | PROTEIN |  | CARBOHYDRATES |  | LIPIDS |  | FIBRE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| (kcal/day) | (grams/d) | (Kcal/day) | (grams/d) | (Kcal/day) | (grams/d) | (Kcal/day) | (g/d) |
| $\mathbf{2 0 3 2}$ | 76 | 305 | 279 | 1118 | 68 | 610 | 28 |
| Vitamin A <br> ( $\mu \mathrm{g} / \mathrm{d})$ | Vitamin C <br> (mg/d) | Vitamin D <br> ( $\boldsymbol{\mu g} / \mathrm{d})$ | Calcium <br> (mg/d) | Iron <br> (mg/d) | Sodium <br> (mg/d) | Zinc <br> (mg/d) | Magnesium <br> (mg/d) |
| $\mathbf{6 0 0}$ | 40 | 5 | 1300 | 14 | 1500 | 7.9 | 240 |

Average of macronutrients and micronutrients daily requirements for children from 9 to 13 years old

| AGE RANGE | Vitamin A ( $\mu \mathrm{g} / \mathrm{d}$ ) | Vitamin C ( $\mathrm{mg} / \mathrm{d}$ ) | Vitamin D ( $\mu \mathrm{g} / \mathrm{d}$ ) | Calcium (mg/d) | Iron (mg/d) | Sodium (mg/d) | Zinc <br> (mg/d) | Magnesium (mg/d) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-8 | 450 | 30 | 10 | 650 | 6.3 | 1200 | 4.8 | 130 |
| 9-13 | $\begin{aligned} & \text { F: } 600 \\ & \text { M: } 600 \end{aligned}$ | $\begin{aligned} & \text { F: } 40 \\ & \text { M: } 40 \end{aligned}$ | $\begin{aligned} & \text { F: } 5 \\ & \text { M: } 5 \end{aligned}$ | $\begin{aligned} & \text { F: } 1300 \\ & \text { M: } 1300 \end{aligned}$ | $\begin{aligned} & \text { F: } 14 \\ & \text { M: } 14.6 \end{aligned}$ | $\begin{aligned} & \text { F: } 1500 \\ & \text { M: } 1500 \end{aligned}$ | $\begin{aligned} & \text { F: } 7.2 \\ & \text { M: } 8.6 \end{aligned}$ | $\begin{aligned} & \text { F: } 240 \\ & \text { M: } 240 \end{aligned}$ |
| 14-18 | $\begin{aligned} & \text { F: } 600 \\ & \text { M: } 600 \end{aligned}$ | $\begin{aligned} & \text { F: } 40 \\ & \text { M: } 40 \end{aligned}$ | $\begin{aligned} & \text { F: } 5 \\ & \text { M: } 5 \end{aligned}$ | $\begin{aligned} & \text { F: } 1300 \\ & \text { M: } 1300 \end{aligned}$ | $\begin{aligned} & \text { F: } 32.7 \\ & \text { M: } 18.8 \end{aligned}$ | $\begin{aligned} & \text { F: } 1500 \\ & \text { M: } 1500 \end{aligned}$ | $\begin{aligned} & \text { F: } 7.2 \\ & \text { M: } 8.6 \end{aligned}$ | $\begin{aligned} & \text { F: } 360 \\ & \text { M: } 410 \end{aligned}$ |


|  | TOTAL <br> kcal/day | PROTEIN <br> (grams/d) | PROTEIN <br> (Kcal/day) | CARBS <br> (grams/d) | CARBS <br> (Kcal/day) | LIPIDS <br> (grams/d) | LIPIDS <br> (Kcal/day) | FIBRE <br> (g/d) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $4-8$ | 1545 | 58 | 231 | 212 | 849 | 52 | 463 | 25 |
| $9-13$ | F: 1845 | F: 69 | 277 | F: 253 | 1015 | 61 | 553 | F: 26 |
|  | M: 2220 | M: 83 | 333 | M: 305 | 1221 | 74 | 666 | M: 31 |
| $14-18$ | F: 2110 | F: 79 | 317 | F: 290 | 1160 | 70 | 633 | F: 26 |
|  | M: 2755 | M: 103 | 413 | M: 378 | 1515 | 92 | 827 | M: 38 |

Proposed distribution of calories across eating occasions from age 4 to 18

| Breakfast | $22 \%$ |
| :---: | :---: |
| Snack | $7 \%$ |
| Lunch | $32 \%$ |
| Snack | $7 \%$ |
| Dinner | $32 \%$ |

Macronutrient distribution for each meal

|  | BREAKFAST (22\%) |  | SNACK (7\%) |  | LUNCH (32\%) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Total <br> Calories | Grams | Total <br> Calories | Grams | Total <br> Calories | Grams |
| Energy | 447 |  | 142 |  | 650 |  |
| Protein | 67 | 17 | 21 | 5 | 97 | 24 |
| Carbohydrates | 246 | 62 | 78 | 19.5 | 357 | 89 |
| Lipids | 134 | 15 | 43 | 5 | 195 | 22 |

## Distribution of Food Group Equivalents with their corresponding Macronutrients

 and Energy requirements for breakfast meal and snack meal| BREAKFAST |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Food Group | Equivalent | Energy (Kcal) | Protein (g) | Lipids (g) | Carbs. (g) |
| Vegetables | 2 | 50 | 4 | 0 | 8 |
| Fruits | 1 | 60 | 0 | 0 | 15 |
| Staples | 2 | 140 | 4 | 0 | 30 |
| Animal Foods | 1 | 75 | 7 | 5 | 0 |
| Legumes | 0.25 | 30 | 2 | 0.25 | 5 |
| Fats \& Oils | 2 | 90 | 0 | 10 | 0 |
| ENERGY (kcal) | *450 CAL | 445 | 17g | 15.2g | 58g |
| ADEQ. (\%) |  | 99\% | 101\% | 102\% | 94\% |
| SNACK |  |  |  |  |  |
| Fruits | 0.5 | 30 | 0 | 0 | 7.5 |
| Staples | 0.5 | 35 | 0 | 0 | 7.5 |
| Fats \& Oils | 0.5 | 22.5 | 0 | 2.5 | 0 |
| Dairy-semi skimmed | 0.5 | 55 | 4.5 | 2 | 6 |
| ENERGY (kcal) | *145 CAL | 142 | 4.5 g | 4.5g | 21g |
| ADEQ. (\%) |  | 100\% | 103\% | 95\% | 108\% |
| LUNCH |  |  |  |  |  |
| Vegetables | 2 | 50 | 4 | 0 | 8 |
| Fruits | 1 | 60 | 0 | 0 | 15 |
| Staples | 3 | 210 | 6 | 0 | 45 |
| Animal Foods | 2 | 150 | 14 | 10 | 0 |
| Legumes | 0.5 | 60 | 4 | 0.5 | 10 |
| Fats \& Oils | 2 | 90 | 0 | 10 | 0 |
| Sugars | 1 | 40 | 0 | 0 | 10 |
| ENERGY (kcal) | *650-CAL | 660 | 28 | 20.5 | 88 |
| ADEQ. (\%) |  | 102\% | 115\% | 95\% | 98\% |

## Distribution of Food Group Meal Patterns (Portions) per Day and Week for each child

| MEAL PATTERN DISTRIBUTION PER DAY (PER WEEK IN PARENTHESIS) |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Units | Breakfast | Lunch |
| Vegetables <br> Cooked <br> Raw | Cups | $1 / 2(2.5)$ <br> $1(5)$ | $1 / 2(2.5)$ <br> $1(5)$ |
| Fruits <br> Chopped <br> Juice | Cups | $1 / 2(2.5)$ <br> $1(5)$ | $1 / 2(2.5)$ <br> $1(1)$ |
| Staples <br> Grains (Rice, potato, pasta) <br> Corn Tortillas <br> Flour tortillas | Cups <br> Pieces <br> Pieces | $\mathbf{4}(20)$ <br> $1(5)$ | $1(5)$ <br> $6(30)$ <br> $2(10)$ |
| Animal Foods | Ounces | $\mathbf{2 ( 6 0 \mathrm { g } ) - 1 0 ( 3 0 0 \mathrm { g } )}$ | $\mathbf{3 ( 9 0 \mathrm { g } ) - 1 5 ( 4 5 0 \mathrm { g } )}$ |
| Legumes | Cups | $1 / 4(1.25)$ | $1 / 2(2.5)$ |
| Fats \& Oils | Tsps. | $\mathbf{2 ( 5 )}$ | $\mathbf{2 ( 5 )}$ |
| Sugars | Tsps. |  | $\mathbf{2 ( 5 )}$ |

The following list of locally available produce was used to prepare the menus.

| Vegetables | Fruits | Staples | Animal <br> Protein | Legumes |
| :---: | :---: | :---: | :---: | :---: |
| Lettuce | Watermelon | Rice | Eggs | Black beans |
| Broccoli | Cantaloupe | White corn | Chicken | Red kidney |
| Cabbage | Banana | Yellow corn | Fish | beans |
| Carrots | Orange | Plantain | Beef | Lentils |
| Celery | Limes | Cassava | Cheese | Split peas |
| Cucumber | Papaya | Cocoyam |  |  |
| Sweet Pepper | *Pineapple | Sweet potato |  |  |
| Tomato | Coconut | Irish Potato |  |  |
| White Onion | *Mango | Spaghetti |  |  |
| Yellow Onion | *Craboo | Flour |  |  |
| *Pumpkin | Grapefruit | Bread |  |  |
| Squash | *Golden plums |  |  |  |
| Chocho | *Avocado |  |  |  |
| Calaloo |  |  |  |  |
| Spinach |  |  |  |  |
| Okra |  |  |  |  |

SFP Suggested Monthly Meal Plan Calendar

| $\begin{aligned} & \text { W } \\ & E \\ & E \\ & K \\ & 1 \end{aligned}$ | Monday <br> Breakfast: <br> Egg Breakfast Wrap Lunch: <br> Baked Chicken W/ Rice \& Beans | Tuesday <br> Breakfast: <br> Chicken Sandwiches Lunch: <br> Stew Beef with Mashed Sweet Potatoes | Wednesday <br> Breakfast: <br> Egg Johnny Cake Lunch: <br> Chicken Vegetable Soup | Thursday <br> Breakfast: <br> Beans Tacos Lunch: <br> Stew Chicken W/ <br>  <br> Flour Tortilla |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { W } \\ & \text { E } \\ & \text { E } \\ & \text { K } \\ & 2 \end{aligned}$ | Monday <br> Breakfast: <br> Banana Pancakes Lunch: <br> Tilapia Fish \& Beans Empanadas | Tuesday <br> Breakfast: <br> Egg Sandwiches Lunch: <br> Stew Chicken W/ Boiled Cassava \& Plantain | Wednesday <br> Breakfast: <br> Chicken Quesadillas <br> Lunch: <br> Lentil Soup with Ground Beef | Thursday <br> Breakfast: <br> Egg Enchiladas Lunch: <br> Shake \& Bake Chicken W/ Pasta Salad |
| $\begin{aligned} & \text { W } \\ & \mathrm{E} \\ & \mathrm{E} \\ & \mathrm{~K} \\ & \\ & \hline \end{aligned}$ | Monday <br> Breakfast: <br> Chicken Torta Lunch: <br> Chicken Escabeche W/ Corn Tortillas | Tuesday <br> Breakfast: <br> Veg. Scrambled Eggs Lunch: <br> Spaghetti W/ Meatballs | Wednesday <br> Breakfast: <br> Egg Breakfast Wrap Lunch: <br> Curry Chicken W/ Rice <br> \& Stew Beans | Thursday <br> Breakfast: <br> Chicken Sandwiches Lunch: <br> Chicken \& Vegetable Chow Mein |
| $\begin{aligned} & \text { W } \\ & \mathrm{E} \\ & \mathrm{E} \\ & \mathrm{~K} \\ & 4 \end{aligned}$ | Monday <br> Breakfast: <br> Egg Johnny Cake Lunch: <br> Ground Beef Tostadas | Tuesday <br> Breakfast: <br> Beans Tacos Lunch: <br> Chicken Fajitas W/ Corn Tortillas | Wednesday <br> Breakfast: <br> Banana Pancakes <br> Lunch: <br> Meatballs W/ Rice \& Beans | Thursday <br> Breakfast: Egg Sandwiches Lunch: <br> Black Dinner Soup |
| $\begin{aligned} & \text { W } \\ & \mathrm{E} \\ & \mathrm{E} \\ & \mathrm{~K} \\ & \\ & \hline \end{aligned}$ | Monday <br> Breakfast: <br> Chicken Quesadillas Lunch: <br> Bbq Baked Chicken W/ Mashed Potatoes | Tuesday <br> Breakfast: <br> Egg Enchiladas <br> Lunch: <br> Beef Stew W/ Cilantro Rice | Wednesday <br> Breakfast: <br> Chicken Torta Lunch: <br> Chicken Burrito | Thursday <br> Breakfast: <br> Veg. Scrambled Eggs <br> Lunch: <br> Beef Soup W/ Corn Tortillas |

## Breakfast Recipes

|  | OPTION \#1 - EGG BREAKFAST WRAP |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Flour tortilla | 5 lbs . (50 tortillas) |  | 1.Chop tomato, onions, and spinach. <br> 2. Heat the oil in a large pan and add chopped vegetables. Stir for about 10 minutes until the vegetables are crisp. <br> 3.Mix eggs in a large bowl and season with salt and black pepper. <br> 4. Pour eggs into the pan and stir until cooked. 5.Prepare a wrap by spreading previously cooked refried beans ( 2 tbsps .) on a flour tortilla ( 8 -inch size), followed by $1 / 2$ cup of scrambled eggs. *See recipe below for flour tortilla |
| Red Kidney beans (whole) | 2 lbs | $\begin{aligned} & 12 \text { cups } \\ & \text { cooked beans } \end{aligned}$ |  |
| Eggs | 30 units |  |  |
| Spinach | 1.5 lbs . | 15 cups raw |  |
| Tomato | 4 lbs . | 5 cups diced |  |
| Onions | 1 lb . | 3 cups, diced |  |
| Oil, salt, black pepper | Use spar amount) | gly (Minimum |  |
| Dessert/Beverage: <br> Orange <br> Watermelon Juice | 50 units 2 large ( |  | - Serve with an orange, peeled and sliced. <br> - Dice and blend watermelon with water. |


|  | OPTION \#2 - CHICKEN SANDWICHES |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |


|  | OPTION \#3 - EGG JOHNNY CAKE <br> Servings: 50 (Serve 1 Johnny cake per child) |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Flour | 10 lbs . (50 johnny cakes) |  | 1. Chop tomato, onions, and sweet peppers. <br> 2. Heat the oil in a large pan and add chopped vegetables. Stir for about 10 minutes until the vegetables are crisp. <br> 3. Mix eggs in a large bowl and season with salt and black pepper. <br> 4. Pour eggs into the pan and stir until cooked. <br> 5. Prepare meal by spreading previously cooked refried beans ( 2 tbsps.) on a journey cake (4-inch size), followed by $1 / 2$ cup of scrambled eggs. <br> *See recipe below for johnny cake |
| Eggs | 25 units |  |  |
| Onion | 1 lb . | 3 cups, diced |  |
| Tomato | 4 lbs . | 5 cups, diced |  |
| Sweet Pepper | 2 lbs . | 6 cups, dice |  |
| Oil, salt and black pepper | Use sparingly |  |  |
| Red Kidney beans (refried) | 2 lbs | 12 cups cooked |  |
| Dessert/Beverage: Cantaloupe Orange Juice | 12 lbs . 50 units |  | - Serve the cantaloupe chopped, providing $1 / 2$ cup per child <br> - Squeeze oranges and mix with water as needed. Provide 1 cup per child. |


|  | OPTION \#4 - BEANS TACOS <br> *Lacto-Vegetarian Option Servings: 50 (Serve 3 tacos per child) |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Corn Tortillas | 6 lbs. (factory made) |  | 1. In a large pan cook red kidney beans with salt and chopped onions ( $1 / 2 \mathrm{lb}$. or 2 cups). <br> 2. Add corn grains to beans and boil for an extra 15 minutes. <br> 3. Prepare a pico de gallo salad by chopping the remaining onions, tomato, and cilantro. Add lime juice. <br> 4. Grate the cheese. <br> 5. Prepare a corn tortilla taco by adding the beans and corn drained ( $1 / 2$ cup), shredded cheese ( 1 tbsp. and pico de gallo ( 1 tbsp .) <br> 6 . Serve 3 tacos per child along with fruits. |
| Red Kidney Beans (Whole) | 5 lbs. | 30 cups drained |  |
| Onion | 1.5 lb . | 4 cups, diced |  |
| Corn grains | 25 cobs or 8, 15 oz . cans |  |  |
| Tomato | 4 lbs. | 5 cups, diced |  |
| Cilantro | 1/2 lb. | 2 cups, diced |  |
| Limes | 2 cups lime juice |  |  |
| Cheese (Happy Cow) | 5 lbs. | 2 kg block, grated |  |
| Oil, salt, black pepper | Use sparingly (Minimum amount) |  |  |


|  | OPTION \#5 - BANANA PANCAKES |  |
| :--- | :--- | :--- | :--- |
| Servings: 50 (Serve 2 pancakes per child) |  |  |


|  | OPTION \# |  |  |
| :--- | :--- | :--- | :--- |


|  |  |  |  | Servings: 50 (Serve 1 quesadilla per child) |  |
| :--- | :--- | :--- | :--- | :--- | :---: |


|  | OPTION \#8 - EGG ENCHILADAS <br> Servings: 50 (Serve 4 enchiladas per child) |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Corn Tortillas | $7 \mathrm{lbs}$. (factory made) |  | 1. Mix eggs in a large bowl and season with salt and black pepper. Pour eggs into a large frying pan with minimum oil and scramble. <br> 2. To prepare the sauce, boil the tomatoes and the onions. When boiled, remove the skin from the tomatoes and blend along with onions and cilantro. Add a minimum amount of salt. <br> 3. Grate the cheese. <br> 4.Prepare enchiladas by assembling the tortillas filled with eggs in a large baking pan. Top with cheese and tomato sauce. <br> 5. Bake for about 15 minutes until the cheese has melted. <br> 6. Serve 4 enchiladas per child. |
| Eggs | 30 units |  |  |
| Cheese <br> (Happy-cow) | 5 lbs. | 2 kg block, grated |  |
| Onion | 1.5 lb . | 4 cups, diced |  |
| Tomato | 4 lbs. | 5 cups, diced |  |
| Cilantro | $1 / 2 \mathrm{lb}$. | 2 cups, diced |  |
| Oil, salt and black peppers | Use spar | ingly |  |
| Dessert/Beverage: Cantaloupe Orange Juice | $\begin{array}{r} 12 \text { lbs. } \\ 50 \end{array}$ |  | - Chop cantaloupe and serve $1 / 2$ cup per child <br> - Squeeze oranges and mix with water as needed. Provide 1 cup per child. |


|  | OPTION \#9 - CHICKEN TORTA (BURGER) <br> Servings: 50 (Serve 1 burger per child) |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken, boneless breast | 4 lbs. | 55 ounces | 1. Stew boneless breast using salt, black pepper, red recado, 1 lb . diced tomatoes and 0.5 lb . diced onions. Cook for about 45 minutes then shred. <br> 2. Slice the remaining tomatoes in thin pieces. <br> 6. Separate lettuce into slices. <br> 7. Slice the remaining onions in thin pieces and soak in vinegar for 10 minutes. <br> 8. Prepare burgers by adding $1 / 2$ tbps. mayonnaise to bread, followed by lettuce, tomatoes, onions and chicken. <br> 9. Serve 1 per child with fruits. |
| Burger Bread | 50 units |  |  |
| Lettuce | 5 lbs . |  |  |
| Tomato | 5 lbs. | $\begin{array}{\|l\|} \hline 10 \text { medium } \\ \text { sizes } \\ \hline \end{array}$ |  |
| Onion | 1.5 lb . | 4 cups, slices |  |
| Oil, salt, black pepper, vinegar | Use spa |  |  |
| Mayonnaise | 2 large j |  |  |
| Dessert/Beverage: Watermelon Cantaloupe Juice | $\begin{array}{\|l\|l} 3 \text { large } \\ 15 \text { lbs. } \end{array}$ | lbs.) | -Serve $1 / 2$ cup chopped per child <br> - Chop and blend with water. Serve 1 cup per child. |


| 2-2 $0^{2}$ a | OPTION \#10 - VEGETABLE SCRAMBLE EGGS |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Corn Tortillas | 7 lbs . (factory made) |  | 1.Chop tomato, onions, and sweet peppers. <br> 2. Heat the oil in a large pan and add chopped vegetables. Stir for about 10 minutes until the vegetables are crisp. <br> 3. Mix eggs in a large bowl and season with salt and black pepper. <br> 4. Pour eggs into the pan and stir until cooked. <br> 5. Serve a long with refried beans ( $1 / 4$ cup), fruit, and corn tortillas (4). |
| Eggs | 30 units |  |  |
| Sweet Pepper | 2 lbs. | 6 cups, dice |  |
| Onion | 1.5 lb . | 4 cups, diced |  |
| Tomato | 4 lbs . | 5 cups, diced |  |
| Red Kidney beans (refried) (Optional) | 3 lbs | 18 cups cooked |  |
| Oil, salt and black peppers | Use sparingly |  |  |
| Dessert/Beverage: <br> Papaya Chocolate milk (Choco-kiwi brand) Milk (Klim Brand) | 12 lbs. <br> 2 packs of 350 grams each 2 cans of 800 grams each, gives 50 cups |  | -Chop papaya and serve $1 / 2$ cup per child - Serve chocolate milk hot or cold (1 cup per child) |


|  | OPTION \#1 - BAKED CHICKEN W/ RICE \& BEANS <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken | 40 lbs . | 110 ounces | 1.Prepare chicken by seasoning with salt, black pepper, and red recado. <br> 2. Slice onions ( 1 lb. .) and tomato, and bake the chicken at $350^{\circ} \mathrm{F}$ for 60-90 minutes. <br> 3. Prepare rice and beans by rinsing the rice and placing in two separate large pans. To prepare one pan (4 lbs. or 10 cups), add chopped onions ( 1 cup), beans ( 1 lb. ), water ( 20 cups) and coconut milk powder (2 packets). <br> 4. Boil the rice at high heat without the lid. When the water is absorbed cover with the lid and cook at low heat. <br> 5. Serve 3 oz. chicken w/ 1 cup rice and vegetable salad of choice. |
| Rice | 8 lbs . | 20 cups |  |
| Red kidney beans | 2 lbs . |  |  |
| Onion | 2 lb . | 6 cups |  |
| Tomato | 2 lbs. | 2.5 cups |  |
| Coconut milk powder | 4 packet |  |  |
| Oil, salt, black pepper, and red recado | Use spa |  |  |
| Vegetable salad of choice + Beverage: Cucumber/lime juice | 5 lbs. cu 3 cups lim 5 tbsps. 7 litres w | umber e juice Honey ter | Peel cucumbers and remove the seeds. Blend cucumber along with lime juice and honey. Substitute honey for brown sugar if needed. |


|  | OPTION \#2 - STEW BEEF WITH MASHED SWEET POTATOES <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Beef, cubes | 12 lbs . |  | 1. Marinate beef cubes with salt, black pepper, and beef consommé. Use seasonings sparingly. <br> 2. Chop and grill onions and garlic (10 cloves) in a large pan. <br> 3. Add beef to the pan and cook for about 90 minutes or until tender. Stir occasionally. <br> 4. Peel and chop sweet potatoes, and boil until soft. <br> 5. Drain the potatoes, and add salt, butter and some milk. <br> 6. Mash and stir until a puree consistency is achieved, continue adding milk as needed. <br> 7. Serve beef ( 3 oz .) with potato puree ( $1 / 2 \mathrm{cup}$ ) and vegetable salad of choice. |
| Sweet Potatoes | 10 lbs . |  |  |
| Onion | 1.5 lb . | 4 cups |  |
| Butter | 3 sticks |  |  |
| Milk, evaporated | 3 large cans |  |  |
| Oil, salt, black pepper, beef consommé, and garlic | Use sparingly, minimum amount needed. |  |  |
| Vegetable salad of choice + beverage: Orange J. | 50 units |  | - Squeeze oranges and mix with water as needed. Provide 1 cup per child. |


|  | OPTION \#3 - CHICKEN VEGETABLE SOUP |  |
| :--- | :--- | :--- | :--- |
| Servings: 50 |  |  |


|  | OPTION \#4 - STEW CHICKEN W/ PUMPKIN TALKARI \& FLOUR TORTILLA <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken | 40 lbs . | 110 ounces | 1. Stew the chicken using salt, black pepper, red recado, diced tomatoes, and diced onions (3 lbs.). Cook for about 60 minutes. <br> 2. To prepare the pumpkin, remove shells and seed, and dice into small pieces. <br> 3. Heat oil in a large pot and sauté onion (1lb.) and garlic (15 cloves) until tender. <br> 4. Add pumpkin to pot and stir. <br> 5. Add pumpkin and coconut milk to pot and boil until tender. <br> 6. Add salt, cumin, and yellow ginger to taste. <br> 7. Serve 3 oz. chicken w/ 1 cup pumpkin and 1 flour tortilla. |
| Flour | 5 lbs . (50 tortillas) |  |  |
| Pumpkin | 25 lbs . |  |  |
| Tomato | 4 lbs. | 5 cups, diced |  |
| Onion | 2 lbs. | 6 cups, diced |  |
| Coconut milk | 10 cups |  |  |
| Oil, salt, black pepper, garlic, cumin, yellow ginger | Use sparingly |  |  |
| Beverage: Cantaloupe juice | 15 lbs . |  | -Chop and blend with water. Serve 1 cup per child. |



|  | OPTION \#6 - STEW CHICKEN W/ BOILED CASSAVA AND PLANTAIN <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken, cuts | 40 lbs . | 110 ounces | 1. Stew the chicken using salt, black pepper, red recado, diced tomatoes, and diced onions. Cook for about 60 minutes. <br> 2. Peel cassava and plantains, and boil separately. <br> 3 . Serve 3 oz . stewed chicken with $1 / 2$ cup plantains, $1 / 2$ cup cassava, and vegetable salad of choice. |
| Plantain | 10 lbs . |  |  |
| Cassava | 10 lbs . |  |  |
| Tomato | 4 lbs. | 5 cups, diced |  |
| Onion | 2 lbs . | 6 cups, diced |  |
| Oil, salt, black pepper, garlic, red recado | Use sparingly |  |  |
| Vegetable salad of choice + Beverage: Mango J. | 20 units |  | Chop and blend with water. Serve 1 cup per child. |



|  | OPTION \#8 - SHAKE \& BAKE CHICKEN W/ PASTA <br> SALAD |  |
| :--- | :--- | :--- | :--- |
| Servings: 50 |  |  |


|  | OPTION \#9 - CHICKEN ESCABECHE W/ CORN TORTILLAS <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken | 40 lbs . | 110 ounces | 1. Season the chicken with salt and black pepper. <br> Leave out a few pieces of chicken bone (10). <br> 2. Place the chicken in baking pans and bake at $350^{\circ} \mathrm{F}$ for about 60-90 minutes. <br> 3. To a large soup pan add water, salt, black pepper, chicken consommé and the pieces of chicken bone, and bring to a boil. <br> 4.After boiling add vinegar, oregano and sliced onions. Add more seasoning according to tase. <br> 5. Serve in bowls by placing the chicken first followed by the soup with onions. <br> 6. Serve escabeche soup with corn tortillas. |
| Corn Tortillas | 10 lbs. (6 tortillas/child) |  |  |
| Onions |  |  |  |
| Vinegar | 250 ml | 1 cup |  |
| Oil, salt, black pepper, oregano, chicken consommé | Use sparingly |  |  |
| Beverage: Orange Juice | 50 units |  | Squeeze oranges and mix with water as needed. Provide 1 cup per child. |


|  |  | OPTION \#10 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| - SPAGHETTI W/ MEATBALLS |  |  |  |  |
| Servings: 50 |  |  |  |  |


|  | OPTION \#11 - CURRY CHICKEN W/ WHITE RICE AND STEW BEANS |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken, cuts | 40 lbs . | 110 oz . | 1. Heat oil in a large pan over medium-high heat. <br> 2. Cook and stir in previously chopped tomato, onion and garlic ( 10 cloves). <br> 3. Add curry powder and thyme and cook until golden brown for about 10 minutes. <br> 4.Stir in chicken and cook until lightly brown for about 15 minutes. Season with salt. <br> 5. Pour enough water at the level of the chicken into the pan and reduce heat. Cover and simmer until chicken is cooked. Stir occasionally. <br> 6. To thicken the gravy, mix flour with water in a separate container and pour into the pan. <br> 7. Serve chicken ( 3 ounces) with rice ( 1 cup), beans ( $1 / 4$ cup), and vegetable salad of choice. |
| Rice | 8 lbs . | 20 cups |  |
| Beans, Stew | 3 lbs. | 18 cups cooked |  |
| Tomato | 4 lbs. | 5 cups, diced |  |
| Onion | 2 lbs. | 6 cups, diced |  |
| Oil, salt, black pepper, garlic cloves, curry powder, thyme | Use sparingly |  |  |
| Vegetable salad of choice + Beverage: Cantaloupe juice | 15 lbs . |  | Serve the cantaloupe chopped, providing $1 / 2$ cup per child |


|  | OPTION \#12 - CHICKEN \& VEGETABLE CHOW MEIN <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken, breast | 5 lbs . | 7 oz . | 1.Prepare noodles according to directions on the package. <br> 2.Chop vegetables in thin slices. <br> 3. Cut chicken breast into small bite sizes. <br> 4.In a bowl whisk together soy sauce ( 1.5 cups), oil (sesame if available-1 cup), and sugar ( 5 tbsps .). <br> 5. Hen at oil in a large skillet over medium heat and add chicken. Cook until brown on all sides then transfer to a plate. <br> 6. Reduce heat, add oil, and sauté the celery for 5 mins. <br> 7.Add cabbage, followed by carrots, and garlic cloves (10 chopped). Cook until veggies are crisp and tender. <br> 8. Add in cooked noodles and chicken, then pour in soy sauce mixture. Toss until sauce is mixed with all the other ingredients. <br> 9. Serve 2 cups chow mein per child. |
| Chow mein noodles | 14 packs of 180 gr. |  |  |
| Sweet pepper | 2 lbs., strips |  |  |
| Onion | 2 lbs., strips |  |  |
| Carrots | 4 lbs., strips |  |  |
| Cabbage | 5 lbs . |  |  |
| Celery | 1 lb . or 4 cups chopped |  |  |
| Oil, salt, soy sauce, Sugar, garlic cloves | Use sparingly |  |  |
| Beverage: Water |  |  |  |



|  | OPTION \#14- CHICKEN FAJITAS W/ CORN <br> TORTILLAS |  |  |
| :--- | :--- | :--- | :--- | :--- |


|  | OPTION \#15 - MEATBALLS W/ RICE \& BEANS |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Beef, ground | 12 lbs . |  | 1. Season ground beef with salt, black pepper, and chopped garlic. Add chopped onions ( 1 lb. ) and chopped sweet pepper ( 1 lb .), and mix. <br> 2. With the use of hands, roll small ball sizes of ground beef. <br> 3. Heat oil in a large frying pan then cook the ground beef evenly on all sides. <br> 4. If you wish to add a tomato sauce to meatballs, follow recipe \#10. <br> 5. Prepare rice and beans by rinsing the rice and placing in two separate large pans. To prepare one pan ( 4 lbs . or 10 cups), add chopped onions ( 1 cup), beans ( 1 lb ), water ( 20 cups) and coconut milk powder (2 packets). <br> 6. Boil the rice at high heat without the lid. When the water is absorbed cover and cook at low heat. <br> 7. Serve meatballs (3) with rice and beans ( 1 cup) and vegetable salad of choice. |
| Rice | 8 lbs . | 20 cups |  |
| Red kidney beans | 2 lbs . |  |  |
| Tomato | 5 lbs . | 6 cups, diced |  |
| Sweet pepper | 1 lb . | 3 cups diced |  |
| Onion | 2 lbs. | 6 cups, diced |  |
| Coconut milk powder | 4 packets |  |  |
| Oil, salt, black pepper, garlic, basil, oregano | Use spar |  |  |
| Vegetable salad of choice + Beverage: Orange J. | 50 units |  | Squeeze oranges and mix with water as needed. Provide 1 cup per child. |


|  |  |  | OPTION \#16 - BLACK DINNER (CHILMOLE) |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Servings: 50 |  |  |  |  |  |


|  | OPTION \#17 - BBQ BAKED CHICKEN W/ MASHED POTATOES <br> Servings: 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ingredients | Weight | Measure | Preparation |
| Chicken, cuts | 40 lbs . | 110 | 1. Season chicken with salt, black pepper, and red recado. <br> 2. Place the chicken in baking pans and bake at $350^{\circ} \mathrm{F}$ for about 60-90 minutes. <br> 3. Dilute BBQ sauce with some water then coat the chicken with the sauce when it is about to finish. <br> 4. Peel and chop potatoes, and boil until soft. <br> 5. Drain the potatoes, and add salt, butter and some milk. <br> 6. Mash and stir until a puree consistency is achieved, continue adding milk as needed. <br> 7. Serve BBQ chicken ( 3 oz .) with mashed potato ( $1 / 2$ cup) and vegetable salad of choice. |
| Potato | 10 lbs . |  |  |
| Milk, evaporated | 3 large cans |  |  |
| Butter | 3 sticks |  |  |
| BBQ sauce | 2 bottles, 18 oz. each |  |  |
| Oil, salt, black pepper, red recado | Use spar |  |  |
| Vegetable Salad of choice + Beverage: Lime Juice | 3 cups lim <br> 7 litres w <br> 5 tbsps. | juice <br> er <br> ney or sugar | Squeeze limes to make 3 cups and mix with water and sugar |


|  | OPTION \#18 - BEEF STEW W/ CILANTRO RICE |  |
| :--- | :--- | :--- | :--- |
| Servings: 50 |  |  |


|  | OPTION \#19 - CHICKEN BURRITO |  |  |
| :---: | :---: | :---: | :---: |
|  | Servings: 50 |  |  |
| Ingredients | Weight | Measure | Preparation |
| Chicken, breast | 5 lbs . |  | 1. Prepare flour tortillas as instructed in recipe below. <br> 2. Stew boneless breast using salt, black pepper, red recado, diced tomatoes and diced onions. Cook for about 45 minutes then shred. <br> 3. To prepare cole-slaw chop carrots into thin strips and grate carrots. Transfer to a large bowl. <br> 4. To the cole-slaw add the dressings: mayonnaise and evaporated milk (as needed). Add a few tsps. of sugar ad toss. <br> 5. Assemble burrito by adding shredding chicken and beans. <br> 6. Serve 1 burrito per child wrapped with chicken (3 oz.), beans ( $1 / 4$ cup), vegetables ( $1 / 4$ cup), and cole-slaw (1/2 cup). |
| Flour Tortilla | 5 lbs . 50 | tortillas) |  |
| Red kidney beans | 2 lbs . |  |  |
| Tomato | 2 lbs. | 2.5 cups diced |  |
| Onion | $1 / 2 \mathrm{lb}$. | 1.5 cups, dice |  |
| Carrots | 5 lbs . |  |  |
| Cabbage | 7 lbs . |  |  |
| Mayonnaise | 2.5 cups |  |  |
| Milk, Evaporated | 2 cups (as needed) |  |  |
| Oil, salt, black pepper, red recado | Use sparingly |  |  |
| Beverage: <br> Watermelon Juice | 2 large (40 lbs.) |  | Dice and blend watermelon with water |



## Additional Recipes

| JOHNNY CAKES | Yields - 10, about 4-inch sizes |
| :--- | :--- |
|  | Preparation <br> - In a bowl mix flour, baking powder and salt. <br> - Add shortening with the use of finger tips to the flour and mix <br> well. |
| Ingredients |  |

## FLOUR TORTILLAS Yields - 10 tortillas

## Preparation

- In a bowl mix flour, baking powder and salt.
- Add shortening with the use of fingertips to the flour and mix well.
- Add water gradually while kneading until you achieve a soft dough.
- Let it rest for 30 minutes.
- Separate dough into round ball shapes (10), then place on a clean surface to flatten/spread the dough out evenly.
- Heat a comal and place each tortilla dough to cook for about 5 minutes on both sides.


## Cooking and Baking Abbreviations

| ABBREVIATION | MEANING |
| :--- | :--- |
| Tsp. | Teaspoon |
| Tbsp. | Tablespoon |
| Min. | Minutes |
| G | Grams |
| Oz. | Ounce |
| Lb. | Pounds |
| oF | Degrees Fahrenheit |
| Lt. | Litres |
| Ml | Millilitres |

## Vegetable Salad Options For Lunch Meals

Lunch meals that do not contain vegetables should include any of the options listed below. Vegetables can be substituted for others depending on availability.

| Rainbow Salad: <br> - Carrots <br> - Purple cabbage <br> - Tomato <br> - Cilantro | Carrots and cilantro salad: <br> - Carrot <br> - Cilantro <br> - Lime juice | Sauteed vegetables: <br> - Calaloo <br> - Onions <br> - Veg. oil | Vegetable stir fry: <br> - Onion <br> - Zucchini <br> - String beans <br> - Carrot <br> - Veg. oil <br> - Soy sauce (optional) | Corn and vegetable salad: <br> - Corn grains <br> - Tomato <br> - Celery <br> - Onions <br> - Lime juice |
| :---: | :---: | :---: | :---: | :---: |
| Veggie Sticks: <br> - Carrot <br> - Celery <br> - Cucumber | Cole-slaw on lettuce wrap: <br> - Carrot <br> - Lettuce leaves <br> - Sour cream <br> - Mayonnaise | Baked Vegetables: <br> - Zucchini <br> - Squash <br> - Pumpkin | Cucumber salad: <br> - Cucumber, diced <br> - Tomato <br> - Lime juice | Steamed Vegetables: <br> - Carrots <br> - Chocho <br> - Squash |



Standardised Salad Recipes For 50 Children

| TYPE OF SALAD | INGREDIENTS | INSTRUCTIONS |
| :---: | :---: | :---: |
| Rainbow Salad | Carrot strips - 5 lbs . <br> Purple or Green Cabbage strips - 5 lbs. <br> Tomato strips - 5 lbs . Cilantro $-1 / 2 \mathrm{lb}$. | Chop vegetables in thin strips and transfer to a large bowl. Toss until all are mixed. Serve 1/2 cup. |
| Carrots and Cilantro Salad | Carrots, grated -4 lbs . Cilantro, chopped - $1 / 2 \mathrm{lb}$. Lime Juice - 1 cup | Grate carrots, chop cilantro, add lime juice, and toss. <br> Serve 1/2 cup |
| Sauteed <br> Vegetable Salad | Calaloo, chopped - 2 lbs . <br> Onions, chopped in strips - 2 lbs . Vegetable oil | Chop vegetables and sauté in minimum oil. <br> Add a pinch of salt. <br> Serve 1/2 cup |
| Vegetable Stir Fry | Onion strips - 2 lbs . <br> Zucchini strips - 5 lbs . <br> String beans, chopped - 3 lbs . <br> Carrot strips - 5 lbs . <br> Vegetable oil + Soy sauce | Chop vegetables and fry in minimum oil. <br> Optional-Soy sauce <br> Serve $1 / 2$ cup |
| Corn and Vegetable Salad | Corn grains - 8 cans, 15 oz each can Tomato, chopped in small pieces -6 lbs. <br> Celery, chopped thin -4 lbs. <br> Onions, chopped - 2 lbs . <br> Lime Juice - 1 cup | Chop vegetables, add lime juice and toss. <br> Add a pinch of salt. <br> Serve $1 / 2$ cup |
| Veggie Sticks | Carrot, strips - 5 lbs . Celery, strips - 5 lbs . Cucumber, strips - 5 lbs . | Chop vegetables into sticks. Serve 3 sticks of each vegetable. |
| Cole-slaw on lettuce wrap | Carrots, grated - 5 lbs . Cabbage, finely chopped - 7 lbs . <br> Mayonnaise - 2.5 cups <br> Milk, evaporated - 2 cups, as needed <br> Lettuce leaves - 2 lbs . | Chop cabbage into thin strips and grate the carrots. Mix vegetables with dressing. Serve $1 / 2$ cup on a lettuce leaf. |
| Bake Vegetable Salad | Zucchini, chopped - 5 lbs <br> Squash, chopped - 7 lbs . <br> Pumpkin, chopped - 12 lbs. | Chop vegetables and bake w/ minimum oil until cooked. Optional Seasoning-cinnamon and paprika. Serve $1 / 2$ cup |
| Cucumber Salad | Cucumber, chopped thin - 5 lbs . Tomato, thin slices - 6 lbs. Lime Juice - 1 cup | Chop vegetables into thin slices, add lime juice, and toss. <br> Serve $1 / 2$ cup |
| Steamed <br> Vegetable Salad | Carrots, chopped - 5 lbs . <br> Chocho, chopped - 5lbs. <br> Squash, chopped - 7 lbs. | Chop all vegetables to small bite sizes and steam. <br> Serve $1 / 2$ cup |

## HAND GUIDE TO PORTION CONTROL

The below image illustrates different measurements that are used when serving meals. While a measuring instrument is more accurate (scale or measuring spoons), these hand guides are helpful when they are not readily available.


RECIPE INGREDIENTS LIST STANDARDISED TO SERVE 50 CHILDREN

| INGREDIENT | QUANTITY NEEDED | INGREDIENT |
| :--- | :--- | :--- | :--- |


| BUTTER <br> - Pancakes or mashed potatoes | 3 sticks | CHOCHO, SOUP | 4 lbs. |
| :---: | :---: | :---: | :---: |
| CORN <br> - Tortilla (store) <br> - Masa (Empanadas) <br> - Grains | 6-7 lbs. *Soup-10lbs. <br> 5 lbs. <br> 8 large cans, 15 oz . | PUPMKIN, TALKARI CASSAVA, BOILED PLANTAIN, BOILED COCO, SOUP | 25 Ibs. 10 lbs. 10 lbs. 4 lbs. |
| PASTA <br> - Spaghetti <br> - Chow mein noodles <br> - Elbows | 14 packs, 1 lb . each 14 packs, 180 g. each 10 packs, 7 oz . each | SPINACH OR CALLALOO <br> - For eggs OKRA | $\begin{aligned} & 7.5 \mathrm{lbs} . \\ & 2 \text { lbs. } \end{aligned}$ |
| RICE | 8 lbs. | CUCUMBER, PASTA | 3 lbs. |
| FLOUR <br> - Tortillas <br> - Pancakes <br> - Johnny cake | 5 lbs. 6 lbs 10 lbs | LETTUCE <br> - Sandwich/ Tostadas | 5 lbs. |
| BREAD <br> - Sandwiches (slices) <br> - Burger <br> - Crumbs | 13 packs <br> 50 units (9 packs of 6) <br> 4 lbs. | CABBAGE, CHOW MEIN CABBAGE, BURRITOS | $\begin{aligned} & 5 \mathrm{lb} . \\ & 2 \mathrm{lbs} . \end{aligned}$ |
| BEANS <br> - Black or red refried <br> - Tacos - Lentils | $\begin{array}{\|l} 2-3 \mathrm{lbs} . \\ 5-6 \mathrm{lbs} . \end{array}$ | CELERY, CHOW MEIN | 1 lb. |


| INGREDIENT | QUANTITY NEEDED | INGREDIENT | QUANTITY <br> NEEDED |
| :--- | :--- | :--- | :--- |
| BANANA <br> - Pancakes <br> - Dessert | 16 units <br> 50 units | CHOCOLATE MILK <br> - Choco-kiwi brand | 2 packs of 350 <br> grams each |
| ORANGES <br> - Dessert <br> - Juice | 50 units <br> 50 units | MILK <br> - Nutri Brand | 4 packs of 120 <br> grams each |
| WATERMELON <br> - Dessert <br> - Juice | 2 large (40 lbs.) |  |  |
| PAPAYA <br> - Dessert | 12 lbs. <br> CANTALOUPE <br> - Dessert <br> - Juice | 15 lbs. |  |
| MANGO |  |  |  |
| - Juice |  |  |  | | 20 units |
| :--- |

## HOME-MADE JELLO - Serves 8

## Ingredients

- 4 cups fresh natural fruit juice (orange, mango or watermelon)
- 4 tbsps. Gelatine (natural flavour) -
- 1 tbsp. Honey (optional)


## Preparation

1. In a medium sized pan pour 1 cup freshly squeezed fruit juice of choice and boil on a low to medium heat.
2. Add 4 tbsps. Gelatine and stir constantly until the gelatine is fully dissolved.
3. Turn of the heat and let it sit for 1-2 minutes.
4. Add the gelatine-juice mixture to the remaining 3 cups of fruit juice. Stir and taste.
5. Add honey if the mixture requires a sweetener.
6. Pour mixture into separate cups and refrigerate overnight.

## BAKED PLANTAIN CHIPS - Serves 10, $1 / 2$ cups

## Ingredients

- Plantain (3 medium)
-Salt, to taste
- Oil (1 tbsp.)

Preparation:

1. Preheat oven to $350^{\circ} \mathrm{F}$.
2. Remove the peel and slice the plantain into thin pieces.
3. Add the plantain slices in a bowl and coat with oil. Toss.
4. Line a baking tray with wrapping paper and place the plantain slices on the tray.
5. Sprinkle with salt and bake for 15-20 minutes, or until golden and crisp.

## Snack Options

## POPSICLE/IDEAL FLAVORS

- Coconut milk w/ cinnamon + cow's milk
- Pineapple, spinach and honey (food processor)
- Banana w/ papaya
- Mango
- Watermelon
- Coconut milk w/ pineapple + honey
- Craboo w/ milk

Ingredients: (Pineapple, spinach and honey)

- Pineapple (1 large)
- Honey (1/4 cup or 4 tbsps.)
- Spinach (1 cup)
- Water


## Preparation:

1. Chop pineapple into cubed sizes and blend with honey at high speed. Separate the pulp.
2. Chop spinach and blend in a food processor with water ( $1 / 2$ cup) until all the spinach has dissolved.
3. In a large container mix pineapple and spinach with additional water ( 3 cups) and stir.
4. Serve in cups or bags and freeze overnight.

## BANANA BREAD - Serves 12 small squares

## Ingredients

- Flour (2 cups)
- Bananas (3 large, ripe)
- Baking soda (1 tsp.)
- Salt (1/2 tsp.)
- Cinnamon (1 tsp.)
- Sugar, preferrable brown (1/2 cup)
- Eggs (2 units)
- Vanilla (1 tsp.)
- Butter (1/2 cup), melted and cooled


## Preparation:

1. Preheat oven to $350^{\circ} \mathrm{F}$.
2. In a large bowl, whisk oil melted butter and brown sugar until well combined. Add eggs, mashed banana and vanilla, whisking until combined.
3. In a separate bowl, combine flour, baking soda and salt. Add dry ingredients to wet ingredients while stirring lightly until no streaks of flour remain.
4. Grease a square pan (9x9) and add the batter to the pan. Smooth into an even layer.
5. Bake for 30 minutes or until cooked. The bread is done when a toothpick inserted into the centre comes out clean.

HOME-MADE YOGURT - $1 / 2$ gallon yogurt yields 16 half-cup servings

Ingredients
-Milk - $1 / 2$ gallon
-Plain cultured yogurt- $1 / 2$ cup
Preparation:

1. Using the electric pressure cooker settings, boil or pasteurise the milk. Remove the pressure cooker pot with milk, cover, and place in the refrigerator. Allow to cool to about 100-110F.
2. Place the pot with milk back in the electric pressure cooker.

Stir in $1 / 2$ cup plain yogurt. Select the yogurt button and set time for 8-10 hours. Cover, allow to sit until time has elapsed.
3. Remove yogurt and place it in the refrigerator after the time is done.
4. Add honey to sweeten and toppings as you wish.

FRUIT CUPS WHEN IN SEASON:

- Mango
- Golden plums
- Kinep
- Craboo
- Sea Grapes

Fruit cups topped with yogurt

## BEVERAGES:

- Fruit shakes w/out sugar (banana, papaya, and mango)
- Sahou drink
- Gungude drink


## GUNGUDE (Drink or porridge)

## Ingredients

- $1 / 2$ cup dried powdered banana or plantain
- 3 cups water
- Salt, to taste
- $1 / 2$ cup coconut milk
- 2 tsps. Vanilla
- 2 tsps. Nutmeg
- 1 cup milk


## Preparation:

1. In a dee pot bring 2 cups water to a boil.
2. In a bowl, pour 1 cup water and stir in powdered banana or plantain in the pot of boiling water.
3. Stir in milk, vanilla and nutmeg.
4. The porridge can be made thick or thin depending on preference.

## SAHOU

## Ingredients

- 1 lb. cassava
- 1 grated coconut
- 1 cup water
- $1 / 4$ tsp. cinnamon
- $1 / 4$ tsp. nutmeg
- 1 tsp. vanilla


## Preparation:

1. Grate cassava and add $2-3$ cups of water to grated cassava and strain. Use the strained liquid to make the sahou.
2. Grate coconut and add about 2-3 cups of water and strain.
3. Add nutmeg, vanilla and cinnamon to a pot with the cassava liquid.
4. Cook over low heat. Be sure to pay attention to the pot, stirring constantly.
5. Add coconut milk and continue to stir until it reaches desired consistency. ${ }^{2}$

## Recommendations For Cooks Before Preparing Recipes

1. Read recipes carefully to be able to have all the equipment and ingredients ready for preparation.
2. It may be necessary to alter some measurements needed, especially when it comes to adding milk, water, or any other liquids. These should be added gradually.
3. The amount of seasonings used should be done sparingly "as needed" or "to taste". This is to limit the excess use of salt in foods. The quantity of oil used should also be minimum.
4. Some meals may be required to prepare in two separate pots or pans because of the large quantities needed to serve. If this is done, you will also need to split the recipes in two.
5. Recipes can also be altered if the specific ingredient is not available. It is important to swap for another ingredient in the same category. For example, swap fish for chicken, or swap mango for oranges.
6. Always try to use produce that is in season, these provide more nutritional value than when out of season.
7. Remember to wash and disinfect each ingredient before preparing meals.


## School Kitchen <br> Manual

NATIONAL
HEALTHY START SCHOOL FEEDING

## Introduction

School feeding programs are important for the nutrition and health of school children. Meals provide both physical and mental health benefits in children; their bodies are given the nutrients they need to grow, and their bellies are full so they can focus and learn. Those preparing food for children have a special and important role. Parents and children trust that food served will be safe, and high quality. This manual is intended to help school feeding programs in a very practical way. School cooks will find step by step instructions for creating a safe school kitchen and producing safe and healthy meals.

## Preparing For Food Handling

## Personal Hygiene

- Store phones and personal items away from food preparation area.
- Cover hair, tie back if needed.
- Make sure shoes, clothes, and apron are clean before entering the kitchen.
- No dangly jewelry.
- Keep nails short.
- Avoid coughing or sneezing around food. (see index: cover your cough)
- Wash hands.


## When to wash hands?

- Before and after preparing food
- Before and after serving food
- Before and after eating
- During food preparation
- After handling non-food waste (trash)
- After handling money
- After using the toilet
- After coughing or blowing nose
- After cleaning and sanitising
- After any time that hands may be at risk of contamination


## Washing hands effectively



WFP. 2019. From the School Gate to Children's Plate: Golden Rules for Safer School Meals Guidelines. https://docs.wfp.org/api/documents/WFP0000105252/download/

## When to wash your hands?

Before and handling and | After touching raw |
| :---: |
| preparing any food. |
| meat, fish, eggs, fruits |
| and vegetables. |

WFP. 2019. From the School Gate to Children's Plate: Golden Rules for Safer School Meals Guidelines. https://docs.wfp.org/api/documents/WFP0000105252/download/

## Kitchen opening checklist

## Done daily

$\square$ Check temperature of refrigerator and freezer
$\square$ Check storage area for signs of pests or insects
$\square$ Clean and sanitise all food preparation surfaces
$\square$ Set out clean dish cloths and sponges (do not reuse dirty cloths or sponges)

Done weekly:
Thermometer calibration checks

## Calibrating a thermometer

Thermometers should be checked weekly or if the thermometer is dropped.

1. Ice water method
a. Fill a 6-inch-wide container with ice. Fill to the top with cold water; stir.
b. Hold the thermometer in the ice water for 30 seconds. The thermometer should not touch the sides or bottom of the container
c. Record the thermometer temperature in the thermometer chart
d. The thermometer should read $32{ }^{\circ} \mathrm{F}$. If it does not, refer to instructions to reset, or get a new thermometer.
2. Boiling water method
a. Fill a small pan with clean water, bring to a rolling boil.
b. Hold the thermometer in the boiling water for 30 seconds (use an oven mitt as needed to protect your hand). The thermometer should not touch the sides or bottom of the pan.
c. Record the thermometer temperature in the thermometer chart
d. The thermometer should read $212^{\circ} \mathrm{F}$. If it does not, refer to instructions to reset, or get a new thermometer.

Thermometer Temperature Log

| School: |  |  | Month: |  |
| :---: | :---: | :---: | :---: | :---: |
| Date | Thermometer use/ ID | Temperature | Comments | Signature |
| Week 1 | 1 |  |  |  |
|  | 2 |  |  |  |
|  | 3 |  |  |  |
| Week 2 | 1 |  |  |  |
|  | 2 |  |  |  |
|  | 3 |  |  |  |
| Week 3 | 1 |  |  |  |
|  | 2 |  |  |  |
|  | 3 |  |  |  |
| Week 4 | 1 |  |  |  |
|  | 2 |  |  |  |
|  | 3 |  |  |  |
| Week 5 | 1 |  |  |  |
|  | 2 |  |  |  |
|  | 3 |  |  |  |

## Temperature Control

1. Check the temperatures of all refrigerators, freezers daily.
a. Refrigerator temperatures should be set at $37^{\circ} \mathrm{F}$. Measured temperature should be between 36 and $41^{\circ} \mathrm{F}$.
b. Freezer temperatures should be set at $0^{\circ} \mathrm{F}$. Measured temperature should be $0^{\circ} \mathrm{F}$ or lower.
2. Record temperatures on the appropriate temperature log. If temperature is not within the guidelines, notify the supervisor.
3. Do not overload the refrigerator, this can cause problems with the temperature
4. Keep refrigerator and freezer doors closed as much as possible
5. Defrost freezers as needed per appliance manual

## Power outages: what to do with food

1. During a power outage, keep refrigerator and freezer doors closed. With doors closed:
a. Refrigerators should be able to keep food $40^{\circ} \mathrm{F}$ or below for 4 hours
b. Freezers should be able to keep food frozen for 24-48 hours
2. When power returns, check the temperature of the refrigerator and freezer.
3. Discard refrigerated food that was above $40^{\circ} \mathrm{F}$ for more than an hour.
4. Only the following refrigerated items may be kept if above $40^{\circ} \mathrm{F}$ for more than 2 hours: uncut fruits and vegetables, hard cheeses, butter or margarine, peanut butter, store bought sauces (barbeque sauce, ketchup, mustard), breads, tortillas, cakes.
5. If items in the freezer still have ice crystals and feel cold as if they were refrigerated, they can be refrozen. Food that thawed and/or was above $40^{\circ} \mathrm{F}$ for more than 2 hours should be discarded.

## In preparation for a scheduled power outage

1. Check the temperatures of the refrigerator and freezer to make sure they are at correct settings
2. Freeze containers of water or bags of ice, to help keep refrigerators and freezers cold. Thawed ice is also an indicator that freezer items must be discarded.
3. Freeze refrigerated items (leftovers, meat, dairy).
4. Fill the freezer-- a full freezer maintains cold temperatures longer.

## How to check the temperature of fridges and freezers

1. If refrigerator and freezer specific thermometers are stored in the appliance, read the temperature and note on the log
2. If a food thermometer is used to check the refrigerator temperature, put the thermometer in a glass of water in the middle shelf of the fridge in the evening and leave overnight. First thing in the morning, before the refrigerator door is opened and closed repeatedly, read the temperature and note on the log.
3. If a food thermometer is used to check the freezer temperature, put the tip of the thermometer in between 2 frozen items that have been in the freezer at least 24 hours. Close the freezer lid and let sit for 3 minutes. Read the temperature and note on the log.

## Refrigerator Temperature Log

| School: | Month: |  |  |
| :---: | :---: | :---: | :---: |
| Date | Fridge temperature | Comments | Signature |
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Freezer Temperature Log

| School: | Month: |  |  |
| :---: | :---: | :---: | :---: |
| Date | Fridge temperature | Comments | Signature |
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## Menu planning

## Food Allergies in students

Before planning the menu, it is important to check with principals and teachers to discover if any children are known to have food allergies. Common items children may be allergic to include seafood, nuts, or eggs. If a student has a food allergy, they must completely avoid that food. A plan must be made for how this can be done, with a group meeting with the child's parents, school administration, and the cooking staff.

## Forecasting and purchasing

It's important to TEST the recipe before serving to the full student population. Amounts may need to be adjusted slightly due to variation in size of product, preparation, etc. You do not want to run out of food when serving students.

## Menu Planning

1. Select recipes for the days you will be serving food
2. Obtain the number of students who will be eating each day
3. Recipes have been calculated for 50 children, so you will need to multiply the recipe amount as needed to match the amount of students eating each day. For example, if the recipe is to serve 100 children, multiply the ingredients by 2 .
4. Write out the total amount needed in each category (see charts- photocopy as needed)
5. Add the amounts to get the total needed for each category
6. List the totals needed for the month. Specify the amounts in pounds (lb.) or units.




## Receiving goods

Procedure for receiving goods:

1. Receive goods in a separate area from cooking, so there is no crosscontamination.
2. Check that the quantity of delivered goods is correct.
3. Check the quality of the delivered goods. Reject and note on the invoice any of the following:

| Item | REJECT item if: |
| :---: | :---: |
| Dry Goods | - Past expiration date <br> - Packaging unsealed <br> - Cans rusted or bulging <br> - Evidence of pests (ex: moths, beetles) <br> - Sight or smell of mold <br> - Damp or wet |
| Produce | - Evidence of spoiling (mold, slime, odor) or pests <br> - Contamination through transport in contact with other products, such as cleaning products or raw meat |
| Refrigerated items | - Item temperature is over $40^{\circ} \mathrm{F}$ <br> - Packaging unsealed |
| Frozen items | - Item is not frozen <br> - Evidence of thaw and re-freeze (juices frozen at the bottom of the package) <br> - Packaging unsealed |
| Eggs | - Cracked <br> - Dirty <br> - Past expiration date |

4. Immediately store food at appropriate temperature, or process immediately for use. When a shipment is received, refrigerated food should be stored first, followed by frozen foods, and then dry goods.
5. Write the date of receipt on packaged items.

## Storage regulations

1. Storage area must be clean, dry, ventilated, and pest free. Garbage facilities should not be in or near storage areas.
2. Storage area must be out of direct sunlight
3. Items must not be stored on the floor. All storage shelves should be minimum 6 inches from the floor. If possible, shelves should also be placed 4 inches away from the wall, to allow for access for cleaning and discourage pests.
4. No chemicals, pesticides, or cleaning items should be stored with food items
5. Dry goods such as beans, flour, and rice should be stored in sealed containers. Only food safe containers should be used; never reuse chemical containers to store food. Other dry goods should be in sealed packaging
6. Periodic checks for moisture, mould, and pests should be done for dry goods.
7. Refrigerated foods should be stored in the following order:

| Highest shelf | Previously cooked or <br> ready-to-eat foods <br> (fresh fruits and veg) |
| :--- | :--- | :--- |
| $\qquad$ | Lish, eggs, whole <br> cuts of beef or pork |
| Lowest shelf | Ground or processed <br> meats |
| Raw chicken |  |

8. Perishable foods stored in the refrigerator should be used within 7 days of preparation
9. Fruit or vegetable items that are shelf stable and will not be used immediately (example: bananas, oranges, plantains, sweet potatoes) can be rinsed with fresh water and dried before storing. This can help prevent fruit flies.

## Inventory

## First in first out inventory management

1. Clearly label food items with date it is received and expiration date. This should be done when items are received, or if products are repackaged for storage (even in the freezer or refrigerator).
2. Foods that have a closer expiration date should placed at the front of the shelves, and be used first
3. Foods should also be placed on the shelves so that the newest items are in the back and older items are in the front. Items shall be used in the order it was received-- first in, first out (also considering expiration dates).
4. Items that are expired should be disposed of.

## Food Handling and Food Safety

## Washing fruits and veg

Washing fruits and vegetables appropriately helps to reduce the risk of food borne illness by products that are contaminated.

1. Before washing produce it is important to wash, rinse, and air-dry all surfaces (including the sink), equipment, and utensils that will come in contact with food, as well as washing your hands.

| Root and Tuber Vegetables | Use a clean brush* to scrub the vegetable while <br> holding it under a stream of cold water. <br> *The products used to wash fruits and vegetables should be <br> used only for this purpose. <br> Dry using a clean towel. |
| :---: | :--- |
| Delicate Fruits \& Vegetables | Wash under a low stream of water while holding in <br> your hands. <br> Spread on a clean towel to dry. |
| Leafy Greens | Remove the outermost layer of a lettuce or cabbage. <br> Submerge in a bowl of cold water for 2 minutes, drain, <br> and rinse with fresh water. |

3. Remove any bruised or damaged areas before cooking.
4. Freshly cut items to be stored in the refrigerator should be labelled and dated.
5. Serve all produce that has been washed and chopped within 7 days if stored at $41^{\circ} \mathrm{F}$ or less.

## Pre-preparation of goods

## Thawing foods safely

1. Frozen foods should be thawed in the refrigerator. Raw meat should be placed on the lowest shelf to thaw, so it doesn't contaminate other foods.
2. If the food is needed immediately, it can be thawed by holding it in clean (drinkable) running water that is $70^{\circ} \mathrm{F}$ or cooler. This should be cooked within 4 hours.
3. Do not refreeze thawed food.

## Preparing foods safely and preventing cross contamination

- Wash hands before and after handling foods
- Surfaces and tools should be cleaned and sanitized before use, and if they become contaminated during use.
- Raw foods can cause illness (uncooked meats, eggs, and unwashed fruits and vegetables).
- Raw foods must be kept completely separated from cooked or ready to eat foods.
- Raw foods should be kept separate from each other unless it is combined for cooking.
- Do not store foods uncovered.
- Do not use the same kitchen cloth to wipe tables and kitchen items.
- Do not use the same cutting boards, containers, or cooking utensils for raw and cooked foods.
- It is best to have different cutting boards set aside for different foods (they can be marked to indicate use). There should be:
- 1 cutting board used to cut raw meats
- 1 cutting board used to cut vegetables and fruits
- 1 cutting board for bread
- Prepare food as quickly as possible; food should not be in the "danger zone" (between 41F and 135F) for more than 2 hours.
- After preparing raw food, clean and sanitise all surfaces and utensils
- Store and dispose of garbage properly in an ideal area to prevent the growth of germs and pests. Vectors such as cockroaches, birds, rats or ants can carry microorganisms which can be deposited on food if the garbage bins are not sealed.


## Temperatures for Food Safety

Temperature "danger zone" is when food is between 41F and 135F. At this temperature bacteria can grow in food, causing illness. See image below.

Cooked food should not be in the "danger zone" temperature for more than 2 hours. When cooking food, the temperature must be measured to make sure the food is completely cooked.

## How to take temperature of food:

1. Clean the tip of the thermometer with alcohol
2. Insert the thermometer into the food. Make sure the tip of the thermometer doesn't touch the side or bottom of the container and is actually in the food.
a. For meats and fish, insert the thermometer in the thickest section
b. For other foods, insert the thermometer in the centre
c. For liquids, make sure the thermometer is submerged 2 inches
d. For frozen foods, the thermometer can be inserted between two packages.
3. Read the temperature.
4. Repeat: 2 separate areas should be measured. This should be done at the end point of the food preparation.

Cooking temperature Chart

| Item | Temperature | Time period at Temperature |
| :--- | :--- | :--- |
| Fruits and vegetables | 135 F | 15 seconds |
| Eggs | 145 | 15 seconds |
| Fish | 145 | 15 seconds |
| Whole cuts of beef or pork | 145 | 15 seconds |
| Ground beef or pork | 155 | 15 seconds |
| chicken | 165 | 15 seconds |
| Dishes that combine raw and <br> cooked ingredients | 165 | 15 seconds |
| Cooked food that is reheated | 165 | 15 seconds |

- If the product contains a variety of meats, cook to the highest required temperature.
- Cooked food that will not be used or eaten immediately should be refrigerated.
- Separate the food into multiple containers if needed to cool food quickly in the refrigerator.

Food should cool to 41 F within 4 hours in the refrigerator, if not, reheat to 165.

- Cooked foods kept in the "danger zone" (41F and 135F) for less than 2 hours can be reheated to 165. If this is not possible, the food should be thrown away after 2 hours.
- Pre-chill cold food ingredients (salads, sandwiches) to 41F before combining.
- After using the thermometer, sanitise with cotton and alcohol and store in a clean and accessible area.



## Serving Food

1. Clean serving area
2. Keep food containers covered when not removing food
3. Hot food should be reheated to 165 if it becomes cold to the touch or serving takes longer than 2 hours (from the time cooking was finished).
4. Food should be served within 2 hours of cooking.

Serving sizes/ portions for different food groups

| Animal Protein (Chicken, fish or Beef) | 3 ounces |
| :--- | :--- |
| Fruits | 1 cup chopped <br> $1 / 2$ cup fruit juice |
| Vegetables | 1 cup raw <br> $1 / 2$ cup cooked |
| Staples, Rice, potato or pasta <br> Corn Tortillas | 1 cup <br> 6 units <br> 2 small or 1 large |
| Legumes (Black/red beans or lentils) | $1 / 2$ cup |
| Sugars and Oils | Limited amount <br> Sugar-1 tsp. for beverages if needed |

## Monitoring and Reporting

This can be done using a notebook. The following should be noted each day food is served:

1. The meal items prepared
2. The amount of servings prepared
3. The amount of food actually served
4. Any problems, issues, or comments

## Cleaning and Waste management

## Washing dishes and equipment

3 container set up (can be 3 sinks or 3 dish washing buckets)

- Bucket/sink 1: dish soap
- Bucket/sink 2: clean rinse water
- Bucket/sink 3: sanitizing solution (3 capfuls of Clorox for every gallon of water)

1. Scrape food residue into trash
2. Wash items in bucket/sink 1, using a designated brush or scrubbing cloth. Replace this water when it is dirty.
3. Rinse items in bucket/sink 2, until all traces of food and soap are removed. Replace this water as needed.
4. Immerse items in bucket/sink 3, and let items stay for at least 30 seconds.
5. Remove items, allow to air dry on a clean, sanitised surface

## Kitchen closing

## Kitchen closing

- Do not leave any food items out. Food should be in sealed containers, or the refrigerator or freezer. The exception would be fruit or vegetables such as bananas, oranges, or plantains, etc. These should be stored off the ground, in a ventilated container, in a cool and dry area.
- Wash and sanitise surfaces
- Refer to sanitisation chart, following schedule for sanitation
- Clean all appliances and utensils and return to storage area
- Sweep and mop floors
- Wash dish cloths
- Sanitise dish sponges
- Dishcloths and sponges can be cleaned and sanitised by washing in hot soapy water, and then boiled. They should be allowed to dry completely before reusing.


## Sanitation Chart

Sample Disinfection log: Edit as needed to match your kitchen set up.
Date: $\qquad$ *Wash hands for at least 20 seconds after cleaning

| Cleaning/ sanitising <br> task | How often to clean | Cleaned <br> $(\checkmark)$ | time | initials |
| :--- | :--- | :--- | :--- | :--- |
| Cleaning equipment | Once a day |  |  |  |
| Bucket handles |  |  |  |  |
| Mop handles |  |  |  |  |
| Broom handles |  |  |  |  |
| High touch surfaces | Twice a day |  |  |  |
| Door handles |  |  |  |  |
| Light switches |  |  |  |  |
| Faucet handles |  |  |  |  |
| Refrigerator door <br> handle |  |  |  |  |
| Freezer door handle |  |  |  |  |
| Shared office <br> supplies (pens) |  |  |  |  |
| Oven knobs |  |  |  |  |
| Laundry |  |  |  |  |
| Aprons |  |  |  |  |
| Kitchen towels and <br> rags |  |  |  |  |
| Cooking prep | Before and after use |  |  |  |
| Tables and <br> countertops |  |  |  |  |
| Food thermometers |  |  |  |  |
| Food transport <br> containers |  |  |  |  |

Sanitation solution

## How to Make Strong (0.5\%) Chlorine Solution from Liquid Bleach

 Use strong ( $0.5 \%$ ) chlorine solution to clean and disinfect surfaces, objects, and body fluid spills.Make new strong $(\mathbf{0 . 5 \%}$ ) chlorine solution every day. Throw away any leftover solution from the day

| $\begin{gathered} \text { ơ } \\ \text { in } \\ \text { 운 } \end{gathered}$ | is |
| :---: | :---: | parts water into a bucke.

Repeat until full.

Store in shade. Do not store in direct sunlight.

CDC. 2018. https://wash.unhcr.org/download/how-to-make-a-strong-chlorine-solution-0-5-from-bleach-cdc-2018

## Garbage

1. Every kitchen should have a garbage bin with a lid. If the school has a compost pile, a separate collection bucket with a lid can be kept for fruit and vegetable scraps.
2. Keep bins covered and away from the food preparation area.
3. All garbage bins and compost buckets should be emptied at the end of each day. Garbage should be stored away from the kitchen, until it can be disposed of by collection or whatever method is used by your school
4. Garbage bins should be cleaned regularly

## Pest prevention

1. Ensure food is properly stored, and waste managed, to discourage pests
2. No animals in the kitchen
3. Maintain screens, and keep unscreened doors closed to prevent flies entering
4. Cardboard boxes should be avoided as storage; they attract pests. No extra boxes should be kept in the kitchen
5. Clean storage areas regularly
6. Monitor for signs of pests
7. Any cooking utensils or surfaces which are suspected to be in contact with pests should be cleaned and sanitized
8. Any food in contact with pests should be thrown away
9. Ensure there is no standing water around the kitchen area (for example, where the sink drains) which could allow for mosquitoes to breed
10. Public Health guidelines for pest control, included recommended chemical use, should be followed.


Recommendations for Adjusting School Feeding Programme

## Standard

Operating Procedures
During the COVID-19 Outbreak of 2021-2022

NATIONAL
HEALTHY START SCHOOL FEEDING

## Introduction

Opening school feeding programmes during the COVID-19 pandemic is an important undertaking. School feeding programmes are a proven method of supporting health and nutrition in children; yet it is also important to continue to minimise the risk of spread of COVID-19 in students and staff. This document intends to assist school administrators and school feeding committees with the important undertakings of reopening school kitchen facilities and restarting school feeding programmes.

This guide is to be used as an addition to school feeding programme standard operating procedures and COVID-19 school protocols which have been previously developed by the Ministry of Education. All prior existing guidelines should continue to be followed.

This guide serves to assist schools in restarting school feeding programmes during this time period. It includes protocols for reopening a kitchen, staff health monitoring, daily sanitation schedules, and illness reporting. In addition, school administration and feeding committees should create a feeding programme plan tailored to the school's own needs and infrastructure. Steps for developing this plan are included in this document.

## Checklist for Reopening School Feeding Programme

- School meets Ministry of Education requirements of handwashing stations, distancing measures, signs posted with handwashing, cough, and hygiene measures, etc.
- School can ensure that running water and supplies for hand washing (soap, paper towels, garbage disposal) will be continual
- A school feeding plan has been endorsed by the administration and school feeding committee
- School feeding Backup Plan in place
- Health screening protocols in place
- Illness reporting protocols in place
- Cooking area is large enough for cooks to be spaced apart
- Cooking area can be safely ventilated (windows and doors open)
- Cooking staff are fully vaccinated
- Cooking staff is trained in proper handwashing and mask usage, and has food handler training as per MoE requirements
- A disinfection schedule is in place and staff is trained in completion and monitoring
- Kitchen is cleaned using the Kitchen Readiness guideline


## School Feeding Plan

This plan should be adapted to each individual school according to their own unique circumstances. Schools should be flexible with this plan, as the COVID-19 situation evolves.

The plan should be developed by school administration, the school feeding committee and cooks. This planning session should look at the feasibility of different school feeding options: take home healthy snacks or fruits/ veggies, breakfast, in school healthy snacks, lunch for half day students, lunch for full day students. The plan should be written down and disseminated to administration, staff, cooking staff, and the school feeding committee. Plans should also be available for review by the Ministry of Education upon request.

Step 1: Determine what meal will be served to children: breakfast, lunch, snack, or take-home ration.

- What is the current modality of teaching, home-based, alternate full days, etc?
- Which meal option would best fit in this schedule?
- What meal option best fits the need of your students?
- How many days of the week will this meal option be provided to students?

Step 2: Determine how this meal will be served to children.

- Pre-portioned single servings are recommended. Can the school purchase disposable plates, etc.? If not, what other option could be used?


## Step 3: Determine where this meal will be served to children.

- Will children (or parents, if meals are to be take-home) collect their meals from a central location? If so, a plan must be made to maintain social distance, and provide shields or spacing for those handing out meals. This should be drawn out and posted. The plan should include where children will enter and sanitise hands, where they will check in for the meal, and where the meal will be handed out.
- Will children stay seated in their classroom, and meals brought to them? If so, who will be responsible for bringing meals and returning items as necessary.
- Will children eat in a common eating area? If so, how can children be spaced out to maintain distance? Are shields or seating charts needed?


## Step 4: Schedule mealtimes.

- A timed schedule must be created. Extra time must be given to the students before eating so they can properly wash their hands.
- Do mealtimes need to be staggered, to reduce the amount of children gathered in the eating area? Thought should be given to spacing out the timing of arrival of students (or parents, if take-home meals are provided) to avoid overcrowding
- Time should be scheduled to clean and disinfect the eating area before and after eating. Who will be responsible for this, students or staff?


## Step 5: Determine how students and parents will be kept informed of school meals.

- How will children notify the school if they want a meal? Who is responsible for collecting and sharing this information with the cook? How far in advance must students notify the school? This information must be collected to ensure adequate amounts of food are prepared.
- How will the school notify families if there are changes in the feeding plan? Who is responsible for this? Who will be in charge in case the person responsible is not available


## School Feeding Backup Plan (in case the cook is ill)

To be determined by the cook, school feeding committee, and administration. The following questions should be reviewed, and the information written down and disseminated to administration, cooking staff, and the school feeding committee.

- Who is the substitute cook?
- Who is responsible for contacting the substitute cook and asking him/ her to report to work if needed?

If no substitute is available:

- What amount of time is needed to notify students and parents that there will not be meals served, and students asked to bring packed healthy lunch?
- Who is assigned to notify students and families? What mechanism will be used (phone calls, WhatsApp, etc)?
- If no substitute cook is available, and there is not sufficient time to notify students and parents that a meal will not be served, what will be done instead? Possible options include:
- source food from alternate vendor
- pre-packaged healthy snack substitute
- other (details must be given)

If these options are selected, the following must be detailed: details of vendor, how to contact the vendor, cost, and payment method, what healthy snack will be used, where is it sourced from, who will purchase the snacks, how will they be transported, what funds will be used for purchase

- If the situation occurs where no cook will be present, and meals cannot be served, how will purchased food ingredients be stored or disbursed so they will not go to waste


## Employee Health

Remember that schools are not expected to screen students or staff to identify cases of COVID-19. If a community (or more specifically, a school) has cases of COVID-19, local health officials will help identify those individuals and will follow up on next steps.

## Staff should monitor for the following:

- fever of 100.5 or greater, cough, shortness of breath, chills, new muscle pain, sore throat, new loss of taste or smell, Gl symptoms (vomiting or diarrhoea), cold or flu symptoms (Staff must be familiar with the meaning of all the symptoms)

Staff should not report to work if they have any symptoms or the cooking staff member has a positive COVID-19 test, or the cooking staff member has a positive test in their household.

1. Staff who arrive to school with symptoms or become sick at school should be isolated from the rest of the staff, and sent home as soon as possible
2. Staff illness (either staff who do not report to work or go home ill) should be reported to the designated responsible person
3. School Feeding Backup Plan is initiated
4. Cooking staff member gets a COVID-19 test

The cooking staff reports illness to $\qquad$ (fill in for your school). This person is responsible for implementing the Feeding Backup Plan.
*Note: Cook must have a negative COVID-19 test to return to work.

## Kitchen Readiness Guidelines

- Facility cleaned top to bottom with chlorine solution (see diagram in Annex 2).
- Windows, screens, fans, and filters cleaned
- Fridges and freezers completely cleaned out, items disposed of, and all surfaces disinfected.
- All cooking appliances (stoves, toasters, crock pots, etc) have been emptied completely and cleaned
- All storage emptied, all surfaces cleaned and sanitised
- All shelving cleaned and sanitised
- All food prep surfaces washed, rinsed, sanitised
- All tools and small wares washed, rinsed, sanitised
- Floors, floor drains cleaned
- Plumbing checked for leaks; pipes flushed
- Gas connection checked for leaks
- Pest control as needed
- Respiratory shield installed for service area, if needed

Before restocking food:

- Check all appliances are properly working
- Check temperatures of fridges and freezers. Refrigerator temperature should be at or below $40^{\circ} \mathrm{F} / 4^{\circ} \mathrm{C}$. Freezer temperatures should be $0^{\circ} \mathrm{F} /-18^{\circ} \mathrm{C}$.
- Storage facility is clean, dry, pest free; Trash facilities cleaned, prepped for activity
- Pipe water is working, and drinking water is available

Chlorine solution guidelines: See Annex 2

## Disinfection Protocol

Sanitisation of high touch areas:
Surfaces should be cleaned as needed with soap and water before sanitation

- See log in Annex 1 for suggested sanitation schedule
- Use chlorine solution (Annex 2) to sanitise hard surface; linens should be washed with detergent and dried completely

Disinfection schedule should be planned, and employees trained in it. This will vary by school kitchen set up and equipment.

- Use log to document (log in Annex 1)

Proper training in handwashing must be done for all staff, following COVID-19 guidelines and existing kitchen Standard Operating Procedures.

## Annex 1

Sample Disinfection log:
Date: $\qquad$ *Wash hands for at least 20 seconds after cleaning

| Cleaning/Sanitising task | How often to clean | Cleaned <br> $(\checkmark)$ | Time | Initials |
| :--- | :--- | :--- | :--- | :--- |
| Cleaning equipment | Once a day |  |  |  |
| Bucket handles |  |  |  |  |
| Mop handles |  |  |  |  |
| Broom handles |  |  |  |  |
| High touch surfaces |  |  |  |  |
| Door handles |  |  |  |  |
| Light switches a day |  |  |  |  |
| Faucet handles |  |  |  |  |
| Refrigerator door handle |  |  |  |  |
| Freezer door handle |  |  |  |  |
| Shared office supplies (pens) |  |  |  |  |
| Oven knobs |  |  |  |  |
| Laundry | Once a day |  |  |  |
| Aprons |  |  |  |  |
| Kitchen towels and rags |  |  |  |  |
| Cooking prep | Before and after use |  |  |  |
| Tables and countertops |  |  |  |  |
| Food thermometers |  |  |  |  |
| Food transport containers |  |  |  |  |

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