

Department of Science and Technology Food and Nutrition Research Institute

# 2020 Menu Guide Calendar

"Nutritious and Affordable Meals for Healthier Kids"





### Mandates

Under Executive Order No. 128 signed on January 30, 1987, the Food and Nutrition Research Institute, consonant to the promotion of efficiency and effectiveness in the delivery of public services, is mandated to perform these functions:

- Undertake researches that define the citizenry's nutritional status, with reference to the malnutrition problem, its causes and effects;
- Develop and recommend policy options, strategies, programs, and projects which address the malnutrition problem for implementation by appropriate agencies; and
- Diffuse knowledge and technologies in food and nutrition and provide S&T services to relevant stakeholders.

### Mission

As the lead agency in food and nutrition research and development, the FNRI's mission is the:

 Provision of accurate data, correct information, and innovative technologies to fight malnutrition.

### Vision

Optimum nutrition for all Filipinos, socially and economically empowered through scientifically sound, environment-friendly and globally competitive technologies.

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# Quality Policy

We are committed to provide products and services in food and nutrition to all stakeholders in accordance with the applicable statutory and regulatory requirements with the highest standards of quality and reliability within our capabilities and resources to plan and implement actions to address risk and opportunities, and to continually improve the effectiveness of our QMS at all times.

### Core Values

Excellence Action-oriented Teamwork Sincerity

## Message from the Secretary

According to the World Food Programme (WFP), 821 million children go to school with empty stomachs across developing nations. Hunger and malnutrition are closely related with the state of food security in the country. Food insecurity, when recurrent, will lead to hunger. And if hunger is persistent, it may lead to undernutrition, impaired development, compromised immunity, and reduced productivity in later years of an individual's life. Hence, a decline in the children's nutritional status may also mean a decline in their academic performance.

Based on the 2018 results of the Food Security Survey component of the Expanded National Nutrition Surveys (ENNS) of the Department of Science and Technology's Food and Nutrition Research Institute (DOST-FNRI), food insecurity in the country remained high, causing millions of children to be stunted or wasted due to severe malnutrition.

The Republic Act No. 11037 or "Masustansyang Pagkain para sa Batang Pilipino Act", institutionalizes a national feeding program for undernourished children in public daycare, kindergarten and elementary schools to combat hunger and undernutrition among Filipino children. The law recognizes the role of DOST- FNRI in the creation of the Implementing Rules and Regulations (IRR) especially in the formulation of cycle menus and standardization of recipes for use in the national school feeding program. The meal shall provide at least one-third (1/3) of the daily requirement based on the Philippine Dietary Reference Intakes (PDRI).

With innovative tools such as DOST-FNRI's 2020 Menu Guide Calendar, this year's theme of "Nutritious and Affordable Meals for Healthier Kids" aims to address specific nutrient deficiencies with 15 costeffective, school-based, and nutrient-dense supplementary food recipes for undernourished children in support of the RA 11037 and its IRR. Part of the goal is to educate children, mothers and caregivers about health and nutrition, so that the improvement in children's nutritional state can be sustained.

We hope that these recipes and the 4-week, 7-day cycle menus in the calendar will help families, feeding coordinators, teachers, parent volunteers, and allied health workers alike to work towards improving and sustaining positive behavior for good quality of life.

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Fortunato T. de la Peña Secretary

### Message from the Director

Children are the hope of our nation's future.

We must provide them good health and proper nutrition to ensure that they are fully-equipped and ready to contribute to our country's brighter tomorrow. Undernutrition, however, is still faced by children which has adverse effects on their growth, brain development, and overall health.

As children enter into school age, they undergo several changes physically, mentally, emotionally, and socially. Moreover, children acquire their food habits and preferences as influenced not only by their parents and guardians but also their school environment.

Thus, the Department of Science and Technology-Food and Nutrition Research Institute (DOST-FNRI) developed healthy recipes for supplementary feeding through the 2020 Menu Guide Calendar (MGC) with the theme "Nutritious and Affordable Meals for Healthier Kids". This is also in response to Republic Act 11037 known as "Masustansyang Pagkain para sa Batang Pilipino Act".

The 2020 MGC aims to provide nutritious and affordable recipes through supplementary feeding. The calendar features 15 recipes with estimates of energy and nutrient contribution per serving. Also included are list of substitute ingredients, fourweek cycle menu, helpful food and nutrition tips, and nutrition articles related to the theme. The developed recipes may be used by feeding coordinators for their supplemental feeding or anyone in preparing their daily meals. The cycle menus may also serve as guide in planning healthy and nutritious foods for the family.

With these nutritious and affordable recipes for schoolage children, we are hopeful that every child in the country becomes a healthier kid and a productive adult in the future.

Isang mapagpala at manigong bagong taon po sa ating lahat!

Mario V. Capanzana, Ph.D. Director

# About the Calendar

With the passage of Republic Act 11037 or *Masustansyang Pagkain para sa Batang Pilipino* Act and the finalization of its Implementing Rules and Regulations between the Department of Education (DepEd) and the Department of Social Welfare and Development (DSWD), the 2020 FNRI Menu Guide Calendar (MGC) focusing on nutritious and affordable recipes for supplementary feeding will be a very valuable tool and reference in the planning of cycle menus and preparation of meals for the Supplemental Feeding Program for Day Care Children and School-Based Feeding Program.

Both feeding programs cater to various age groups. This is a formidable challenge for DSWD and DepEd – the agencies' feeding coordinators, teachers and co-implementers to address the energy and nutritional needs of the children aged 3 – 5, and 6 – 9 and 10 – 12 years old respectively for the duration of the 120 feeding days by giving the same dishes/meals but of corresponding quantity to meet their needed energy and nutrient requirement for the day's meal.

The FNRI-developed recipes feature a variety of ingredients such as fish, seafood, meat, poultry, and beans & legumes that provide protein and minerals to support catch-up growth and development of children. Root crops were incorporated for added energy and carbohydrates to sustain them in their daily activities. Vegetables supply vitamins and minerals to regulate body processes and for increased immunity. Fruits can be served, funds permitting.

Cognizant that children may not be as receptive to vegetables for the unusual or unfamiliar flavors, recipes were developed in such a way that vegetables were mixed with dishes the children are familiar with or with their favorite dishes. Changing the manner of preparation and presentation such that veggies have become incognito was also done. We are positive that through time, children can acquire a liking or taste for vegetables through gradual exposure.

Highlighted are 12 nutritious meals – nine (9) one-dish meals and three (3) combo meals, and 4 weekly 7-day cycle menus incorporating the vibrant photo-documented recipes with estimates of energy and nutrient content per serving, yield per recipe, and cost per meal that included viand and rice. Each meal can provide 1/3 of the Recommended Energy Intakes (REI) and Recommended Nutrient Intakes (RNI) for optimum nutrition of children.

A recommended list of substitutes for fish and vegetables was also provided considering that fish and vegetables can be seasonal, not locally available in an area, or not popularly consumed in an area.

Articles on The Philippines' Future: Today's Filipino Children, Nutritional Needs of School-age Children, Simple Ways to Develop Healthy Eating among Children, Farm to Table: Nourishing the Next Generation, and Food Safety Tips for Food Handlers are also included. The cover and other graphics for the Menu Guide Calendar 2020 have been designed using resources from Freepik.com.

While the MGC is intended for supplementary feeding programs for DepEd and DSWD, it can be also be a valuable tool in planning, preparing and serving healthier and affordable, yet simple and appetizing meals in homes, institutions and non-government agencies implementing similar feeding programs.



### **Estimated Energy and Nutrient Content of the Meal**

Amount per serving	% Contribution *
552 kcal	35
18.8 g	63
82 mg	12
3.7 mg	37
445 µg RE	111
19 mg	42
	<b>per</b> <b>serving</b> 552 kcal 18.8 g 82 mg 3.7 mg 445 µg RE

\* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

### Chicken *lumpia*

2 pcs Egg, chicken, whole, beaten 2 tsps | Salt, iodized 1/8 tsp | Black pepper, ground 3 cups Chicken, breast, ground 1 ½ cups Carrots, chopped 1/3 cup Kinchay, chopped 1/4 cup Onion, white, chopped Garlic, chopped 2 Tbsps 20 pcs Lumpia wrapper, medium, separated

Ingredients

I cup | Cooking oil

### Ginulay na mais at malunggay

- ⅓ cup Cooking oil
- 1/4 cup Onion, white, chopped
- 2 Tbsps | Garlic, chopped
- 4 cups | Corn on the cob, vellow, shredded
- 6 cups | Water
- | Tbsp | Salt, iodized
- 1/8 tsp | Black pepper, ground
- I cup | Carrots, thin strips
- 3 cups Malunggay leaves

### Procedures

### Chicken *lumpia*

- I. In a bowl, combine egg, salt, and pepper.
- 2. In another bowl, combine ground chicken, carrots, kinchay, onion and garlic. Add the egg mixture. Blend well.
- 3. Place 3 Tbsps or 45 grams of the mixture, l inch from the bottom of the wrapper. Fold both sides and roll the wrapper tightly. Seal the end by moistening with water. Repeat with the rest of the mixture.
- 4. In a pan, heat oil. Fry *lumpia* for 5 minutes or until golden brown.
- 5. Transfer in a strainer or in a bowl with paper towels to drain excess oil.
- 6. Slice each *lumpia* into 2 pieces.

### Ginulay na mais at malunggay

- I. In a pot, heat oil. Sauté onion, garlic, and corn.
- 2. Add water, salt and pepper. Cover and bring
- to a boil. Simmer for 5 minutes.
- 3. Add carrots and malunggay.
- Cover and simmer for 2 minutes.

	Age group (years old)					
	3-5	6-9	10- 12			
Yield (servings)	20	13	10			
Chicken lumpia	2 pcs	3 pcs	4 pcs			
Ginulay na mais at malunggay	1⁄2 cup	<sup>3</sup> ⁄ч <b>сир</b>	1 cup			
Boiled rice	<sup>3</sup> ⁄4 <b>сир</b>	1 cup	1 1/4 cup			

### Total cooking time:

Chicken *Jumpia* - 20 minutes Ginulay na mais at malunggay - 15 minutes

### Preparation time:

Chicken *Jumpia*-40 mins Ginulay na mais at malunggay - 40 mins

Price: Php 24.50

### Chicken Iumpia & Ginulay na mais at malunggay

SUN	MON	TVE	WED	THU	FRI	SAT	JANUARY 2020
			<b>1</b> New Year's Day	2	3	4	Include sliced or chopped vegetables to children's favorite recipes and soups.
5	6	7	8	q	10	11	
12	13	14	15	16	17	18	DECEMBER 2019 SUN MON TUE WED THU FRI SAT 1 2 3 4 5 6 7
19	20	21	22	23	24	<b>25</b> Chinese New Year's Day	8       9       10       11       12       13       14         15       16       17       18       19       20       21         22       23       24       25       26       27       28         29       30       31
26	27	28	29	30	31		SUNMONTUEWEDTHUFRISAT234567891011121314151617181920212223242526272829



Estimated Energy and Nutrient Content of the Meal
Amount

	Amount per serving	% Contribution *
Energy	563 kcal	35
Protein	17.5 g	58
Calcium	62 mg	9
iron	3 mg	30
Vitamin A	160 µg RE	40
Vitamin C	21 mg	47

\* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

### Ingredients

⅓ cup	Cooking oil
2 Tbsps	Garlic, chopped
<i>И</i> с <b>ир</b>	Onion, white, chopped
Ч cups	Pork, <i>liempo</i> , lean, groun
l Tbsp	Salt, iodized
1⁄8 <b>†sp</b>	Black pepper, ground
l cup	Water
2 packs	Tomato sauce
3 ½ cups	Potato, cubed
⅓ cup	Bell pepper, red, strips
2 Tbsps	Sugar, white
<b>2</b> ½ cups	Green peas, frozen
l pack	Raisins
(50 g/pack)	

### Procedure

- I. In a pan, heat oil. Sauté garlic, onion, ground pork, salt and pepper.
  - Cover and cook for 20 minutes.
- 2. Add water, tomato sauce, potato, bell pepper and sugar. Cover and bring to a boil. Simmer for 5 minutes.
- 3. Add green peas and raisins. Cover and simmer for 3 minutes.

	Age group (years old)						
	3-5	6-9	10- 12				
Yield (servings)	20	13	10				
Ground pork menudo	⅓ <b>сир</b>	<sup>1</sup> ∕2 cup	<sup>3</sup> ∕4 cup				
Boiled rice	<sup>3</sup> ⁄4 сир	1 cup	1 1/4 cup				

Total cooking time: 40 minutes

Preparation time: 30 minutes

**Price:** Php 26.00

SUN	MON	TVE	WED	THU	FRI	SAT	FE	BRI	JA	RY	2	020
						1	imp	od sour portant rowth (	in chil	of iron Idren Ictive	n's	
2	3	4	5	6	7	8						
<b>q</b>	10	11	12	13	14	15	SUN	JAN MON TU	NUARY : E WED			SAT
16	17	<b>18</b>	19	20	21	22	5 12 19 26	6 7 13 14 20 21 27 28		2 9 16 23 30	5 10 17 24 31	4 11 18 25
23	24	25 EDSA Revolution Anniversary	26	27	28	29	SUN 1 8 15 22 29		E WED 4 11 18 18		FRI 6 13 20 27	SAT 7 14 21 28

Tokwa balls with gravy

Estimated Energy and
Nutrient Content of the Meal

	Amount per serving	% Contribution *
Energy	623 kcal	39
Protein	19.6 g	65
Calcium	180 mg	26
Iron	4.6 mg	46
Vitamin A	156 µg RE	39
Vitamin C	11 mg	24

Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

<u>r the</u>	meatballs	For the	e gravy sau
pcs	Egg, chicken, whole,	l∕3 cup	Cooking oi
	beaten	<sup>1</sup> ∕4 cup	Onion, whi <sup>.</sup>
cup	Cooking oil		chopped
tsps	Salt, iodized	½ cup	All-purpos
tsp	Black pepper, ground		flour
cups	<i>Tokwa</i> , mashed	3 cups	Water
cups	Pork, <i>liempo</i> , lean,	l pack	All-purpos
	ground		cream
cups	<i>Kalabasa,</i> fruit,	2 Tbsps	Soy sauce
	chopped	2 tsp	Salt, iodize
cup	Kulitis (spinach),	⅓ tsp	Black pepp
	chopped		ground
bsps	Garlic, chopped	½ <b>cup</b>	Kulitis
cup	Onion, white, chopped		(spinach), chopped
bsps	Kinchay, chopped		chopped
cups	All-purpose flour		

2 cups Cooking oil for frying

auce	I. Prepare the meatballs:
oil	$\cdot$ In a bowl, combine eggs, oil, salt
/hite,	and pepper.
1	$\cdot$ In another bowl, combine <i>tokwa</i> , ground
ose	pork, <i>kalabasa, kulitis</i> , garlic, onion,
	kinchay and flour.

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pepper,

- Add the egg mixture. Blend well.
- · Divide the mixture by 40, approximately 3 tablespoons or 45 grams each portion.
- · Shape each portion into balls. Chill for at least 30 minutes.
- $\cdot$  In a pot, heat oil. Deep fry the meatball for 5 minutes or until golden brown.
- · Transfer meatballs in a strainer or bowl with paper towels to drain excess oil.
- 2. In a pan, heat oil. Sauté onions and flour.
- 3. Add water. Stir thoroughly to avoid lumps. Cover and bring to a boil.
- 4. Add cream, soy sauce, salt and pepper. Simmer uncovered for 2 minutes.
- 5. Add kulitis. Simmer for I minute.
- 6. Pour gravy over the meatballs before serving.

	Age group (years old)					
	3-5	6-9	10- 12			
Yield (servings)	20	13	10			
Tokwa balls with gravy	2 pcs tokwa balls + 3 Tbsps gravy	3 pcs tokwa balls + ¼ cup gravy	4 pcs tokwa balls + ½ cup gravy			
Boiled rice	<sup>3</sup> ₄ <b>сир</b>	1 cup	1 ¼ cup			

### Total cooking time: I hour

Preparation time: 40 minutes

Price: Php 20.50

### Ingredients

- 2 Tb 2 c

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Procedure

SUN	MON	TVE	WED	THU	FRI	SAT	M,	AR	
1	2	3	4	5	6	7	cł	Intro hildre ch is	en a
8	q	10	11	12	13	14	Gê	of   a	•
15	16	17	18	19	20	21	SUN M	FEI ON TU	
22	23	24	25	26	27	28	2 2 9 1 16 1 23 2		
29	30	31							<b>JE</b> 7 4

# MARCH 2020

Introduce tokwa to children as meatballs which is a low cost source of protein, iron and calcium.

FEBRUARY 2020							
SUN	MON	TVE	WED	THU	FRI	SAT	
						1	
2	3	4	5	6	7	8	
P	10	11	12	13	14	15	
16	17	18	<b>1</b> 9	20	21	22	
23	24	25	26	27	28	29	
		APF	RIL 20	)20			
SUN	Mon	APF TVE	R <mark>IL 2</mark> C WED	) <b>20</b> Thu	FRI	SAT	
SUN	MON				FRI 3	SAT 4	
SUN 5	MON 6		WED	THU			
		TUE	WED 1	THU 2	3	4	
5	6	TUE 7	WED 1 8	THU 2 9	3 10	4 11	

# Sardines -*kalabasa* patties

Estimated Energy and Nutrient Content of the Meal					
Amount % per Contribution serving *					
<b>Energy</b> 576 kcal 36					
Protein 17.4 g		58			
Calcium	33				
Iron	3.9 mg	39			
Vitamin A	164 µg RE	41			
<b>Vitamin C</b> 14 mg 31					
* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male					

	<u>e patties</u>		
Ч cups	<i>Kalabasa,</i> fruit, chunks Egg, chicken, whole,	3 cups	All-purpos
	chunks		flour
Чрсѕ	Egg, chicken, whole,	l cup	Cooking oil
	beaten		
2 tsp	Salt, iodized	For the	sauce
	Black pepper,	2 Tbsps	Cooking o
	ground	l Tbsp	Garlic,
6 cans	Sardines in		chopped
	tomato sauce,	2 Tbsps	Garlic, chopped Onion, wh chopped
	drained, mashed,		chopped
	set the sauce aside	2 Tbsps	Ginger,
Ч cups	<i>Kulitis</i> (spinach),		crushed
	shredded	2 cups	s Sardines
2 Tbsps	Garlic, chopped		sauce
⅓ cup	Onion, white,	½ cup	sauce Banana catsup
	Onion, white, chopped		catsup

Ingredients



### I. Prepare the patties:

nite,

- · Steam squash in a steamer for
- 15 minutes. Mash in a bowl and set aside.
- $\cdot$  In a bowl, combine egg, oil, salt and pepper.
- · In another bowl, combine sardines, steamed kalabasa, kulitis, garlic, onion
- and flour. Add the egg mixture. Blend well.  $\cdot$  Divide the mixture by 40, approximately
- 3 tablespoons or 40 grams each portion. Shape each portion into patties.
- $\cdot$  In a pan, heat oil. Fry the patties for
- 3 minutes each side or until brown.
- · Transfer in a strainer or bowl with paper towels to drain excess oil.
- 2. In another pan, heat oil. Sauté garlic, onion, ginger, sardines sauce and catsup. Cover and simmer for 3 minutes.
- 3. Serve patties with sauce on the side.

	Age gr	oup (yea	rs old)
	3-5	6-9	10- 12
Yield (servings)	20	13	10
Chicken almondigas	2 pcs patties + 2 Tbsps sauce	3 pcs patties + 3 Tbsps sauce	4 pcs patties + 1⁄4 cup sauce
Boiled rice	<sup>3</sup> ⁄ч <b>сир</b>	1 cup	1 1⁄4 cup

Total cooking time: 40 minutes

Preparation time: 40 minutes

Price: Php 20.00





# APRIL 2020

Sardines and other small fishes are good sources of calcium, essential for children's growth, strong bones and teeth.



SUN	MON		WED		FRI	SAT
	2	3	4	5	6	7
8	P	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

MAY 2020						
SUN	MON	TVE	WED	THU	FRI	SAT
						2
3	4	5	6	7	8	P
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

# Chicken almondigas

<b>Estimated Energy and Nutrient</b>
Content of the Meal

	Amount per serving	% Contribution *
Energy	571 kcal	36
Protein	21.1 g	70
Calcium	112 mg	16
Iron	5.1 mg	51
Vitamin A	603 µg RE	151
Vitamin C	18 mg	40

Based on Philippine Dietary Reference \* Intakes (PDRI) for 6-9 years old, male

Ingreaienis							
For the meatballs½ cupCooking oil4 pcsEgg, chicken, whole, beaten2 TbspsGarlic, chopped½ cupCooking oil Cooking oil½ cupOnion, white, chopped2 tspsSalt, iodizedchopped							
<u>For the</u>	<u>meatballs</u>	l∕₄ <b>cup</b>	Cooking oil				
Ч рсѕ	Egg, chicken,	2 Tbsps	Garlic,				
	whole, beaten		chopped				
⅓ cup	Cooking oil	И∕ч сир	Onion, white,				
2 tsps	Egg, chicken, whole, beaten Cooking oil Salt, iodized		chopped				

I ½ cups

2 cups

2 cups

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<b>v</b>		,
Salt, iodized		chopped
Black pepper,	IO cups	Water
ground	⅓ cup	Patis
Chicken, breast,	2 cups	Patola, sliced
ground	3 ½	Misua
Onion, white,	packs	
chopped	(50 g/	
Carrots, chopped	pack)	
All-purpose flour	I ½ cup	Carrots,
Cooking oil		chopped
for frying	Ч cups	Malunggay
	Black pepper, ground Chicken, breast, ground Onion, white, chopped Carrots, chopped All-purpose flour Cooking oil	Black pepper,IO cupsground½ cupChicken, breast,2 cupsground3 ½Onion, white,packschopped(50 g/Carrots, choppedpack)All-purpose flour1½ cupCooking oilu

leaves

### Procedure

I. Prepare the meatballs:
$\cdot$ In a bowl, combine eggs, oil, salt and pepper.
$\cdot$ In another bowl, combine ground
chicken, onion, carrots and flour.
Add the egg mixture. Blend well.
$\cdot$ Divide the mixture by 40, approximately
2 tablespoons or 35 grams each portion.
<ul> <li>Shape each portion into balls.</li> </ul>
$\cdot$ In a pot, heat oil. Fry the meatballs
for 5 minutes or until golden brown.
$\cdot$ Transfer meatballs in a strainer or bowl with
paper towels to drain excess oil. Set aside.
2. In a pot, heat oil. Sauté garlic and onion.
3. Add water, <i>patis, patola</i> and meatballs.
Cover and bring to a boil. Simmer for 3 minutes.
4. Add <i>misua</i> and stir well to avoid lumping.
Cover and simmer for 2 minutes.
5. Add carrots and <i>malunggay</i> leaves.
Cover and simmer for I minute.

	Age group (years old)					
	3-5	6-9	10- 12			
Yield (servings)	20	13	10			
Chicken almondigas	2 pcs meatballs + ½ cup soup	3 pcs meatballs + <sup>3</sup> ⁄4 cup soup	4 pcs meatballs + 1 cup soup			
Boiled rice	<sup>3</sup> ⁄4 сир	1 сир	1 ¼ cup			

Total cooking time: I hour and 30 minutes

Preparation time: I hour

Price: Php 23.50



SUN	MON	TUE	WED	THU	FRI	SAT	MAY 2020
					1 Labor Day	2	This recipe is high in vitamin A and C which can boosts your child's immunity against infections and
3	4	5	6	7	8	q	diseases.
10	11	12	13	14	<b>1</b> 5	16	APRIL 2020 SUN MON TUE WED THU FRI SAT
17	18	19	20	21	22	23	5       6       7       8       9       10       11         12       13       14       15       16       17       18         19       20       21       22       23       24       25         26       27       28       29       30       JUNE 2020
24	25	26	27	28	29	30	SUN       MON       TUE       WED       THU       FRI       SAT         1       2       3       4       5       6         7       8       9       10       11       12       13         14       15       16       17       18       19       20         21       22       23       24       25       26       27         28       29       30

### Estimated Energy and Nutrient Content of the Meal

	Amount per serving	% Contribution *
Energy	586 kcal	37
Protein	13.5 g	45
Calcium	90 mg	13
Iron	2.9 mg	29
Vitamin A	198 µg RE	50
Vitamin C	21 mg	47

\* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

round p	oork <i>picadillo</i> soup	Vegetable Tempura				
⅓ cup	Cooking oil	For the batt	ter			
Tbsps	Garlic, chopped	½ <b>cup</b>	All-purpose	I½ cups	<i>Sitaw</i> , sliced	
⅓ cup	Onion, white,		flour	(40 pcs)		
·	chopped		Cornstarch	2 cups	Cooking oil	
3 cups	Pork, <i>liempo,</i> lean,	2 Tbsps				
	ground		powder	For the te	mpura sauce	
6 cups	Water		Sali, ioaizea		Soy sauce	
	Salt, iodized	1/8 <b>tsp</b>			b   Water	
	Black pepper, groun	d ,	pepper, ground			
	Carrots, diced	l cup	Water, ice cold		o Ginger, grated	
	<i>Sayote,</i> strips	3 cups	Kalabasa, fruit,	1/1	b Sugar,	
	Malunggay leaves		sliced	74 Cu	white	
- oupo		(00 pcs)			wille	

# Ground pork picadillo soup with vegetable tempura

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### Procedure

### Ground pork picadillo soup

- I. In a pan, heat oil. Sauté garlic, onion and ground pork. Cover and cook for 20 minutes
- 2. Add water, salt and pepper.
- Cover and bring to a boil.
- 3. Add carrots and sayote. Cover and simmer for 5 minutes.
- 4. Add *malunggay* leaves. Simmer for 2 minutes.

### Vegetable tempura

#### I. Prepare the batter

- In a bowl, combine flour, cornstarch, baking powder, salt, and pepper.
- $\cdot$  Add water and blend well.
- Refrigerate for 30 minutes.
- 2. Prepare the tempura sauce
- In a bowl, combine soy sauce, water, ginger and sugar. Set aside.
- 3. Dip kalabasa and sitaw into the batter.
- 4. In a pot, heat oil. Fry the vegetables until batter is cooked and crispy.
- 5. Transfer the tempura in a strainer or bowl with paper towels to drain excess oil.6. Serve with tempura sauce on the side.

	Age group (years old)					
	3-5	6-9	10- 12			
Yield (servings)	20	13	10			
Ground pork picadillo soup	1/2 cup soup	3⁄4 cup soup	1 cup soup			
Vegetable tempura	2 pcs sitaw + 3 pcs kalabasa	3 pcs sitaw + 4 pcs kalabasa	4 pcs sitaw + 6 pcs kalabasa			
Boiled rice	<sup>3</sup> ⁄ч сир	1 cup	1 1/4 cup			

#### Total cooking time:

Ground pork picadillo - 30 minutes Vegetable tempura - 40 minutes

#### Preparation time:

Ground pork picadillo - 30 minutes Vegetable tempura - 45 minutes

Price: Php 19.50

### Ingredients



# **JUNE** 2020

For picky eaters, make vegetables more interesting by dipping in batter and frying to achieve that crispy texture.



MAY 2020 SUN MON TUE WED THU FRI SAT q JULY 2020

SUN	MON	TVE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	P	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

# Veggie patties with liver

Estimated Energy and Nutrient Content per serving of the Meal							
Amount % per Contribution serving *							
Energy	589 kcal	37					
Protein	22.5 g	75					
Calcium	107 mg	15					
Iron	4.4 mg	44					
Vitamin A	504 µg RE	126					
Vitamin C	12 mg	27					
* De se d'an Dhilinging Distant Defenseres							

Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

### Ingredients

Чрсѕ	Egg, chicken, whole, beaten Cooking oil Salt, iodized	l∕₄ cup	Onion, white, chopped <i>Kalabasa</i> , fruit, strips <i>Kulitis</i> (spinach), shredded All-purpose flour Cooking oil Catsup, banana
⅓ cup	Cooking oil	2 cups	Kalabasa,
2 tsps	Salt, iodized		fruit, strips
⅓ <b>tsp</b>	Salt, iodized Black pepper, ground Chicken, breast, ground Chicken, liver, chopped Garlic, chopped	5 cups	<i>Kulitis</i> (spinach),
	ground		shredded
Чсирѕ	Chicken,	2 cups	All-purpose
	breast, ground		flour
l∕ч <b>сup</b>	Chicken, liver,	l cup	Cooking oil
	chopped	I 1/4	Catsup, banana
2	Garlic, chopped	cups	
Tbsps			

### I. In a bowl, combine egg, oil, salt and pepper.

2. In another bowl, combine ground chicken, liver, garlic, onion, kalabasa, kulitis and flour. Add the egg mixture. Blend well.

Procedure

- 3. Divide the mixture by 40, approximately 2 tablespoons or 40 grams each portion. Shape each portion into patties.
- 4. In a pan, heat oil. Fry the patties for 4 minutes each side or until brown.
- 5. Transfer in a strainer or bowl with paper towels to drain excess oil. 6. Serve with catsup on the side.

	Age group (years old)					
	3-5	6-9	10- 12			
Yield (servings)	20	13	10			
Veggie patties with liver	2 pcs patties	3 pcs patties	4 pcs patties			
Boiled rice	<sup>3</sup> ∕4 <b>сир</b>	1 сир	1 ¼ cup			

### Total cooking time: I hour

Preparation time: 30 minutes

Price: Php 21.00



SUN	MON	TVE	WED	THU	FRI	SAT	<b>JULY</b> 2020
			1	2	3	4	Incorporate ground liver in patties. Liver is loaded with iron and vitamin A.
5	6	7	8	q	10	11	
12	13	14	15	16	17	18	JUNE 2020 SUN MON TUE WED THU FRI SA 1 2 3 4 5 6
19	20	21	22	23	24	25	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 AUGUST 2020
26	27	28	29	30	<b>31</b> Eidul Adha		SUN         MON         TUE         WED         THU         FRI         SA           2         3         4         5         6         7         8           9         10         11         12         13         14         15           16         17         18         19         20         21         22           23         24         25         26         27         28         29           30         31         5         5         5         5         5         5

SAT

SAT

 *Ginataang munggo* and *kalabasa* with dilis

### Estimated Energy and Nutrient Content of the Meal

	Amount per serving	% Contribution *
Energy	565 kcal	35
Protein	19.6 g	65
Calcium	376 mg	54
iron	4.4 mg	44
Vitamin A	157 µg RE	39
Vitamin C	28 mg	62

\* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

### Ingredients

Ч сups I ½ сup	Water <i>Munggo</i> , green, dried
⅓ cup	Cooking oil, for frying
2 cups	<i>Dilis,</i> dried
I/3 cup	Cooking oil, for sautéing
2 Tbsps	Garlic, chopped
l∕₄ cup	Ginger, crushed
l∕₄ cup	Onion, white, chopped
l cup	Tomato, red, sliced
2 cups	Water
Ч ½ cups	<i>Kalabasa</i> , fruit, cubed
l Tbsp	Salt, iodized
⅓ <b>tsp</b>	Black pepper, ground
2 cups	Coconut cream, pure

### 4 cups Malunggay leaves

### Procedure

- In a pot, combine water and munggo. Cover and bring to a boil.
   Simmer for 40 minutes.
   Do not drain. Set aside.
- 2. In a pan, heat oil. Fry dilis until brown and crisp. Set aside.
- In another pot, heat oil.
   Sauté garlic, ginger, onion and tomato.
- H. Add water, *kalabasa*, cooked *munggo*, salt and pepper.
  Cover and bring to a boil.
  Simmer for 5 minutes.
- 5. Add coconut cream and *malunggay*. Simmer uncovered for 2 minutes.
- 6. Serve with fried *dilis* on top.

	Age group (years old)					
	3-5	10- 12				
Yield (servings)	20	13	10			
Ginataang nunggo and kalabasa with dilis	<sup>1</sup> / <sub>2</sub> cup + 1 Tbsp <i>dilis</i>	<sup>3⁄4</sup> cup + 2 Tbsps <i>dilis</i>	1 cup + 3 Tbsps <i>dilis</i>			
Boiled rice	<sup>3</sup> ∕4 <b>сир</b>	1 cup	1 ¼ сир			

### Total cooking time: 30 minutes

Preparation time: I hour

Price: Php 18.00



SUN	MON	TVE	WED	THU	FRI	SAT	AUGUST 2020
						1	Add gata to your classic ginisang munggo to enhance its
2	3	4	5	6	7	8	flavor and provide more energy to children.
q	10	11	12	13	14	15	
16	17	18	19	20	<b>21</b> Ninoy Aquino Day	22	JULY 2020         SUN       MON       TUE       WED       THU       FRI       SAT         1       2       3       4         5       6       7       8       9       10       11         12       13       14       15       16       17       18
23	24	25	<b>26</b> National Heroes'	27	28	29	12       13       14       15       16       17       16         19       20       21       22       23       24       25         26       27       28       29       30       31         SEPTEMBER 2020
zΛ	<b>Z1</b>		Day				SUNMONTUEWEDTHUFRISAT12345
JU	31						6       7       8       9       10       11       12         13       14       15       16       17       18       19         20       21       22       23       24       25       26         27       28       29       30       5       5

# Pork ginisang sinigang

Estimated	d Ener	rgy an	d I	Nutrient
Con	tent o	of the	M	eal

	Amount per serving	% Contribution *
Energy	546 kcal	34
Protein	16.6 g	55
Calcium	83 mg	12
Iron	3.7 mg	37
Vitamin A	150 µg RE	38
Vitamin C	26 mg	58

\* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

### Ingredients

l∕₂ cup	Cooking oil
l∕₄ cup	Onion, white, sliced
2 ½ cups	Tomato, red, sliced
Ч cups	Pork, <i>liempo</i> , lean, sliced
6 cups	Water
2 cups	<i>Gabi</i> , cubed
3 cups	<i>Sitaw</i> , sliced
l pack	Sinigang mix
(44 g/	
pack)	
2 Tbsps	Patis
l Tbsp	Salt, iodized
7 ½ cups	Kangkong, leaves
	and stem, sliced

### Procedure

- I. In a pot, heat oil. Saute onion, tomato and pork.
- 2. Add water. Cover and bring to a boil. Simmer for 20 minutes or until pork is tender.
- 3. Add *gabi, sitaw, sinigang* mix, patis and salt. Cover and bring to a boil. Simmer for 3 minutes.
- 4. Add kangkong. Simmer for 2 minutes.

	Age group (years old)					
	3-5	3-5 <mark>6-9</mark> 10- 12				
Yield (servings)	20	13	10			
Pork ginisang sinigang	<sup>1</sup> ∕2 <b>сир</b>	1 cup	1 ½ <b>сир</b>			
Boiled rice	<sup>3</sup> ∕4 <b>сир</b>	1 сир	1 ¼ cup			

Total cooking time: 35 minutes

Preparation time: 30 minutes

Price: Php 27.50



SUN	MON	TUE	WED	THU	FRI	SAT	SEPTEMBER 2020
		1	2	3	4	5	<i>Gabi</i> is a good source of fiber and minerals which is essential for digestive health.
6	7	8	q	10	11	12	
13	14	15	16	17	18	19	AUGUST 2020
20	21	22	23	24	25	26	SUN       MON       TUE       WED       THU       FRI       SAT         2       3       4       5       6       7       8         9       10       11       12       13       14       15         16       17       18       19       20       21       22         23       24       25       26       27       28       29         30       31
27	28	29	30				OCTOBER 2020         SUN       MON       TUE       WED       THU       FRI       SAT         1       2       3         4       5       6       7       8       9       10         11       12       13       1H       15       16       17         18       19       20       21       22       23       24         25       26       27       28       29       30       31

# Sweet and Sout meatballs

Estimated Energy and Nutrient Content of the Meal					
	Amount per serving	% Contribution *			
Energy	589 kcal	37			
Protein	18.6 g	62			
Calcium	92 mg	13			
Iron	3.7 mg	37			
Vitamin A	353 µg RE	88			
Vitamin C	6 mg	13			

Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

or th	<u>e meatballs</u>	For the s	auce
l pcs	Egg, chicken,	l∕₄ cup	Cooking oil
	whole, beaten	2 Tbsps	Garlic, choppe
cup	Cooking oil	I/3 cup	Onion, <i>bomba</i>
tsps	Salt, iodized		quartered
3 tsp	Black pepper,	I ½ cups	Carrots, thin
	ground		quarter cut
cups	Chicken,	l cup	Water
	breast, ground	l cup	Catsup, banar
cups	<i>Kamote</i> tops,	l can	Pineapple, tidl
	leaves, green,		drain and set
	sliced thinly		aside syrup
cup	Onion, white,	2 Tbsps	Sugar, brown
	chopped	2 tsps	Salt, iodized
cups	All-purpose	2 Tbsps	Vinegar,
	flour		coconut
cups	Cooking oil for	2 tsps	Cornstarch
	frying	2 Tbsps	Water
		2 Tbsps	Spring onions,

Þ

1/

2

1/8

3

2

2

### I. Prepare the meatballs · In a bowl, combine eggs, oil, salt and pepper. · In another bowl, combine ground chicken, kamote tops, onion, and flour.

- Add the egg mixture. Blend well.
- $\cdot$  Divide the mixture by 40, approximately 2 tablespoons or 30 grams each portion.

Procedure

- · Shape each portion into balls.
- Chill for at least 30 minutes.
- $\cdot$  In a pot, heat oil. Fry the meatballs for 5 minutes or until golden brown.
- · Transfer meatballs in a strainer or bowl with paper towels to drain excess oil.
- 2. In a pan, heat oil. Saute garlic, onion and carrots.
- 3. Add water, catsup, syrup, sugar, salt and vinegar. Cover and bring to a boil. Simmer for 2 minutes.
- 4. In a bowl, combine cornstarch and water to make a slurry. Add the slurry to the sauce and blend well. Cover and simmer for 2 minutes or until mixture thickens.
- 5. Add the cooked meatballs and pineapples. Cover and cook for I minute. 6. Serve with spring onions on top.

	Age gr	rs old)	
	3-5	6-9	10- 12
Yield (servings)	20	13	10
Sweet and sour meatballs	2 pcs meatballs + ¼ cup veg & sauce	3 pcs meatballs + ⅓ cup veg & sauce	4 pcs meatballs + ½ cup veg & sauce
Boiled rice	<sup>3</sup> ⁄ч <b>сир</b>	1 cup	<b>1</b> ¼ cup

Total cooking time: I hour

Preparation time: 40 minutes

Price: Php 20.00

### Ingredients

pped

nbay,

anana

chopped

tidbits,

SUN	MON	TUE	WED	THU	FRI	SAT	OCTOBER 2020
				1	2	3	Upgrade children's meal by adding carrots and <i>kamote</i> tops which are good sources of vitamin A for healthy eyes and skin.
4	5	6	7	8	q	10	
11	12	13	14	15	16	17	SEPTEMBER 2020 SUN MON TUE WED THU FRI SAT 1 2 3 4 5
18	19	20	21	22	23	24	6       7       8       9       10       11       12         13       14       15       16       17       18       19         20       21       22       23       24       25       26         27       28       29       30
25	26	27	28	29	30	31	SUN         MON         TUE         WED         THU         FRI         SAT           1         2         3         4         5         6         7           8         9         10         11         12         13         14           15         16         17         18         19         20         21           22         23         24         25         26         27         28           29         30

### Estimated Energy and Nutrient Content of the Meal

servingContribution *Energy646 kcal40Protein17.9 g60Calcium115 mg16		Amount per	%
Protein         17.9 g         60           Calcium         115 mg         16			Contribution *
<b>Calcium</b> 115 mg 16	Energy	646 kcal	40
	Protein	17.9 g	60
<b>Iron</b> 3.3 mg 33	Calcium	115 mg	16
	Iron	3.3 mg	33
<b>Vitamin A</b> 135 µg RE 34	Vitamin A	135 µg RE	34
<b>Vitamin C</b> 18 mg 40	Vitamin C	18 mg	40

\* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male

### Ingredients

	$\sim$
sh fille	et .
½ cup	All-purpose flour
l Tbsp	Salt, iodized
l/8 tsp	Black pepper,
	ground
20 pcs	Galunggong,
l pc =	deboned, fillet
illets)	
3 pcs	Egg, chicken,
	whole, beaten
2 cups	Breadcrumbs
2 cups	Cooking oil
3∕4 <b>cup</b>	Catsup, banana
1/2 cup	Mavonnaise

Fi

2 f

Potato soup 4 cups | Water 4 cups | Potato, chunks <sup>1</sup>/<sub>4</sub> cup Cooking oil 2 Tbsps | Garlic, chopped 1/4 cup | Onion, white, chopped | pack All-purpose cream Salt, iodized I Tbsp Black pepper, 1/8 tsp ground Kamote tops, leaves, 4 cups green, strips

### Procedures

### Fish fillet

- I. In a bowl, combine flour, salt and pepper. Blend well.
- 2. Dredge fish fillet into the flour mixture.
- 3. Dip fish in beaten eggs and dredge into breadcrumbs. Coat all sides.
- 4. In a pan, heat oil. Fry fish for 4 minutes or until golden brown.
- 5. Transfer in a strainer or bowl with paper towels to drain excess oil.
- 6. In a bowl, combine catsup and mayonnaise. Blend well.
- 7. Serve fish fillet with the dip on the side.

### Potato soup

- I. In a pot, combine water and potato. Cover and bring to a boil. Simmer for 10 minutes. Remove the potatoes and mash. Set aside the water used for boiling.
- 2. In a pan, heat oil. Saute garlic, onion and mashed potato.
- 3. Add the water used in boiling the potatoes.
  - Cover and bring to a boil. Simmer for 3 minutes. 4. Add cream, salt and pepper.
    - Simmer uncovered for 3 minutes.
  - 5 Add kamente tare Simura for L
  - 5. Add kamote tops. Simmer for I minute.

	Age group (years old)						
	3-5	6-9	10- 12				
Yield (servings)	20	13	10				
Fish fillet	2 pcs	3 pcs	4 pcs				
Potato soup	И сир	l∕3 <b>cup</b>	½ <b>с⊔р</b>				
Boiled rice	<sup>3</sup> ⁄ч <b>сир</b>	1 cup	<b>1</b> ¼ cup				

### Total cooking time:

Fish fillet - 40 minutes Potato soup- 30 minutes

### Preparation time:

Fish fillet- I hour and 20 minutes

Potato soup- 30 minutes

Price: Php 33.50

### Fish fillet & Potato soup

SUN	MON	TVE	WED	THV	FRI	SAT	NOVEMBER 2020			
<b>1</b> All Saint's Day	2 All Soul's Day	3	4	5	6	7	Potatoes are high in vitamin C which allows iron from plants to be absorbed better by			
8	q	10	11	12	13	14	the body.			
15	16	17	18	19	20	21	OCTOBER 2020 SUN MON TUE WED THU FRI SAT			
22	23	24	25	26	27	28	12345678910111213141516171819202122232425262728293031			
29	<b>30</b> Bonifacio Day						DECENBER JO20SUNMONTUEWEDTHUFRISAT112345678910111213141516171819202122232425262728293031J			

# Pork veggie embutido

Content of the Meal						
	Amount per serving	% Contribu- tion *				
Energy	614 kcal	38				
Protein	16.3 g	54				
Calcium	95 mg	14				
Iron	3.6 mg	36				
Vitamin A	174 µg RE	44				
Vitamin C	12 mg	27				
* Based on Philippine Dietary Reference Intakes (PDRI) for 6-9 years old, male						

Ectimated Energy and Nutrion

For

3 1/2

Ingredients									
<u>the eggs</u>									
Чсир	s	Water Egg, chicken, whole							
5 pc	s	Egg,							
		chicken,							
		whole							
		<u>mbutido</u>							
3 pcs	E	gg, chicken, hole, beaten alt, iodized	3 cups	<i>Kulitis</i> (spinach), shredded Onion, white, chopped Raisins					
	w	hole, beaten		shredded					
2 tsps	S	alt, iodized	<sup>l</sup> ∕₄ cup	Onion, white,					
⅓ <b>tsp</b>	B	ack pepper,		chopped					
	gr	round	l pack,	Raisins					
cups	Po	ork, <i>kasim</i> ,	small						
	gr	round	l∕₂ cup	Cooking oil					
cups	K	ack pepper, round ork, <i>kasim</i> , round <i>alabasa</i> , fruit, rips	I ⅓ cups	Cooking oil Catsup, banana					
	st	rips		banana					



### Procedure

- I. Prepare the boiled eggs
  - · In a pot, combine water and egg. Cover and boil for 10 minutes.
  - · Drain and soak eggs in tap water.
  - · Peel and slice into quarters. Set aside.
- 2. Prepare the meat mixture
  - $\cdot$  In a bowl, combine eggs, salt and pepper.
  - · In another bowl, combine ground pork, kalabasa, kulitis, onion and raisins. Add the egg mixture. Blend well.
- · Divide meat mixture into 5 portions or 270 grams.
- 3. Assemble the embutido
  - · Place one portion of the meat mixture in a
  - 12 x 12-inch aluminum foil.
  - · Flatten the mixture to form a rectangle.
  - $\cdot$  Place 4 slices of boiled eggs at the center.
  - · Wrap the foil around the meat mixture. Ensure the eggs are in the center.
  - $\cdot$  Seal the ends tightly. Repeat with the other portions.
- 4. Transfer to a steamer. Steam the *embutido* for 25 minutes.
- 5. Let it cool and chill for 30 minutes.
  - Remove the aluminum foil.
- 6. In a pan, heat oil. Fry the *embutido* until brown on all sides.
- 7. Remove from heat. Slice each embutido to 8 pieces.
- 8. Serve with catsup on the side.

	Age gr	oup (yea	up (years old)		
	3-5	6-9	10- 12		
Yield (servings)	20	13	10		
Pork-veggie embutido	2 pcs	3 pcs	4 pcs		
Boiled rice	<sup>3</sup> ⁄ч <b>сир</b>	1 cup	1 ¼ cup		

### Total cooking time: 15 minutes

Preparation time: I hour

Price: Php 24.00



# List of Substitute Ingredients

Month	Recipe	Ingredient	Substitute	
MONUN	necipe	Tildi, edient	Substitute	
January	l. Chicken <i>lumpia</i> 2. Ginulay na mais at malunggay	Malunggay	<i>Kamote</i> tops, green/ Kulitis (spinach)	
February	3. Ground pork <i>menudo</i>	Potato	<i>Kamote</i> , yellow	
March	4. <i>Tokwa</i> balls with gravy	<i>Kulitis</i> (spinach)	Kangkong/Kamote tops, green/ Malunggay leaves	
April	5. Chicken <i>almondigas</i>	Malunggay	Kulitis (spinach) / Kamote tops	
May	6. Sardines- <i>kalabasa</i> patties	Sardines in tomato sauce	Mackerel in tomato sauce	
		Kalabasa	Kamote, orange or yellow/ Potato	
June	7. Ground pork <i>picadillo</i> soup 8. Vegetable tempura	Malunggay	Kamote tops, green/ Kulitis (spinach)/ Sili leaves	
		Kalabasa	Kamote, yellow or orange	
July	9. Veggie patties with liver	<i>Kulitis</i> (spinach)	Kangkong/ Kamote tops, green/ Alugbati	
August	10. <i>Ginataang munggo</i> and <i>kalabasa</i> with <i>dilis</i>	Kalabasa	<i>Kamote</i> , orange	
September	ll. Pork <i>ginisang sinigang</i>	Kangkong	Mustasa	
October	12. Sweet and sour meatballs	Kamote tops	Kulitis (spinach) / Kangkong/ Alugbati	
November	13. Potato soup	Galunggong	Deboned Bangus/ Alumahan/ Tulingan/ Dalagang bukid	
November	IH. Fish Fillet	<i>Kulitis</i> (spinach)	Kangkong/ Kamote tops, green/ <i>Malunggay</i> leaves/ Uray	
December	15. Pork-veggie <i>embutido</i>	Kalabasa	Kamote, orange	
	Boiled rice	Rice	Iron-fortified rice (IFR)	

















# Cycle Menu: Week I

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast	Ripe mango Poached egg Wheat bread Fresh milk	Ripe <i>saba Picadillo</i> omelet Boiled rice Hot Choco	Grapes Toasted dried <i>danggit</i> with tomatoes Fried rice Milk	<i>Lakatan</i> Fried luncheon meat <i>Pipino</i> Boiled rice Chocolate drink	Strawberry Dilis fritters Lettuce- singkamas salad Fried rice Fresh milk	Peras Labahita steak with onion and fried potatoes Boiled rice Hot Choco	Apple Native <i>longganisa</i> Boiled okra Fried rice Milk
AM Snack	Ginatang monggo	Turon	Puto with white cheese	Palitaw with grated coconut	Squash <i>kutsinta</i>	Carrot cake	Bibingka pinipig
Lunch	Stir fried pork with chicharo & green beans Boiled rice Chilled ripe <i>langka</i>	Egg drop soup with <i>kulitis</i> Beef tapa Boiled brown rice Suha	<i>Sinampalukang manok</i> Boiled rice Ube ice cream	Sweet and sour pompano Cassava tops/ alugbati tempura Boiled rice Guyabano	Pork ginisang sinigang Boiled rice Ube halaya	Beef <i>salpicao</i> Steamed broccoli Boiled rice Papaya	Chicken cordon bleu Steamed <i>sayote</i> & carrot Boiled rice <i>Buko pandan</i>
PM Snack	Pansit bihon gisado	Purple <i>kamote</i> fritters	Maruya	Kababayan	Banana cue	Spanish bread	Siopao asado
Dinner	Ginulay na mais at malunggay Chicken lumpia Boiled rice Watermelon	Sopa de ajo Ginataang tilapia with mustasa Boiled rice Lemonade	Pinakbet with lechon kawali Boiled rice Buko sherbet	Ginataang munggo & kalabasa with dilis Boiled rice Chilled Melon drinks	Chicken embotido Letsugas-suha ensalada Boiled Rice Vanilla ice cream	Nilasing na hipon Green peas- carrot with kasuy Boiled brown rice Ripe piko	Pork-garlic steak Alukon-katuray gisado Boiled rice Santol ade
					/		

# Cycle Menu: Week 2

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast	Dalandan Sausage- scrambled egg w/ onions & tomatoes Fried rice Fresh milk	Ripe Indian Mango Ham and cheese Wheat bread Hot choco	<i>Latundan</i> Fried galunggong Papaya <i>atsara</i> Garlic rice Milk	Ripe papaya Fish <i>embotido</i> Garlic Rice Hot choco	Guyabano Tortang itlog na may patatas Boiled brown rice Fresh milk	Chico Toasted dried <i>dilis</i> with tomatoes Boiled rice Hot choco	Avocado Salted egg with tomatoes Boiled rice Milk
_							
AM Snack	<i>Tamales</i> Hot tea	Wafer biscuit	<i>Minatamis</i> na Cassava	Maja blanca	Oatmeal cookies	Coconut macaroons	Sumang pinipig
Lunch	Sweet and sour meatballs Boiled rice Fresh fruit salad	Pork adobo Baguio beans- <i>chicharo</i> gisado Boiled rice Melon	Beef <i>kaldereta</i> Coleslaw Boiled rice Chilled <i>marang</i>	Cream of spinach soup Fried chicken <i>Apan-apan</i> Boiled brown rice Watermelon	Ground pork menudo Boiled rice Siniguelas	Sinigang na bangus with veggies Boiled rice Pineapple	Nilagang baka with veggies Ensaladang talong Boiled rice Lakatan
PM Snack	Ginataang mais	Pansit bihon	Biko	Doughnut	Chicken yakisoba	White corn <i>maja</i>	Pichi-pichi
Dinner	Inihaw na pusit at hito Ginataang kamansi Boiled brown rice Green apple	Chicken <i>pastel</i> Stir fried <i>toge</i> <i>at sitsaro</i> Boiled rice Molded gelatin	Potato soup Fish fillet Boiled rice Buko pie	Sweet and sour pork with lychee Fresh <i>pako</i> salad Boiled rice <i>Ginumis</i>	Clear pork broth w/ toasted garlic & spring onions <i>Dalag pochero</i> with veggies Boiled rice <i>Buko</i> pie	Clam soup with uray Afritadang manok Boiled brown rice Chilled durian	Maya-maya escabeche Pinakbet Boiled rice Honeydew melon

# Cycle Menu: Week 3

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast	Lakatan Sarciadong turcillo Garlic rice Fresh milk	Grapes Fried Balila Ensaladang labanos Boiled rice Hot choco	Dragon fruit <i>Tinapang</i> <i>Tamban</i> & tomatoes Milk	Guava Puto bumbong with grated coconut Filled cheese Chocolate drink	Ponkan orange Paksiw na hasa-hasa with ampalaya Fried rice Fresh milk	Rambutan Fried longganisa & tomatoes Garlic rice Hot choco	Ripe papaya Salted egg- tomatoes & pipino Boiled rice Milk
AM Snack	Empanada	Hopia baboy	Sapin-sapin	Puto-kutsinta with cheese	Ginatan halo halo	<i>Kulitis</i> (spinach) pasta	Boiled corn
Lunch	Chicken teriyaki Buttered green beans, carrots & cauliflower Boiled brown rice Iced <i>buko</i>	Clear soup with quail eggs Inihaw na tamban Steamed okra and kamote tops Boiled rice Chilled nata de coco	Sinigang na buto-buto with veggies Shrimp okoy Boiled brown rice Lanzones	Ginataang puso ng saging Halabos na alimasag Boiled rice Ube-macapuno Ice cream	<i>Nilagang manok</i> with veggies Boiled rice <i>Kalabasa</i> flan	Bangus tocho Fried Labong lumpia Boiled rice Duhat	Ground pork picadillo soup Vegetable tempura Boiled brown rice Green apple
PM Snack	Halo-halo	Ginataan munggo	Puto pao	Spaghetti with meat sauce	Cheesy ensaymada	Lomi	Inihaw na saba
Dinner	Pork-veggie embutido Boiled rice Sago't gulaman	Kadyos, baboy at langka with sweet potato leaves Boiled rice Atis	Veggie patties with liver Boiled rice Banana shake	Buttered shrimp with garlic <i>Dinengdeng</i> Boiled rice <i>Latundan</i>	<i>Ginataang biya Upo</i> -carrot <i>gisado</i> Boiled rice Melon	Beef bulalo nilaga with veggies Boiled rice Choco ice cream	Chicken <i>salpicao</i> with mushroom and spinach Boiled rice Tropical fruits medley

# Cycle Menu: Week 4

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast	Lychees Skinless <i>longganisa</i> Scrambled egg with tomato, onion and spinach Boiled rice Fresh milk	Mangga supsupin Champorado with tuyo Hot choco	Dalandan Corned beef spaghetti Toasted <i>pandesal</i> Milk	Ripe papaya Fruity oatmeal Boiled egg Chocolate drink	<i>Latundan</i> Tuna omelet Boiled rice Fresh milk	Tiesa Scrambled egg with bacon bits Malunggay pandesal Hot choco	Guava Potato-fruity salad Fried <i>kikiam</i> Milk
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AM Snack	Monggo buchi	Bibingkang galapong	Sotanghon soup	Chicken arroz caldo	Egg sandwich	Chicken lomi	Tuna sandwich
Lunch	Chicken <i>pochero</i> with veggies Boiled rice <i>Kamachile</i>	Sardines- kalabasa patties Boiled rice Pineapple	Pesang dalag with sayote & pechay and Tahure- tomato sauce Boiled rice Chilled nata- langka	Pork igado Adobong sitaw Boiled rice Buko pandan gelatin	Chicken almondigas Vegetables tempura Boiled rice Lanzones	Arroz a ala Cubana Apan-apan Ripe mango	Ginulay na mais at dahong sili Fried dalagang bukid Boiled rice Datiles
PM Snack	Pancit canton	Chocolate crinkles	Mangga at suman	Mais con yelo	Kalingking	Inihaw na mais	Siopao bola-bola
Dinner	Sinigang na talakitok with veggies Pork strip fritters Mango–sago gelatin	Pork barbecue <i>Kalabasa-patani</i> gisado Boiled brown rice <i>Pulvoron</i>	Chicken shanghai <i>Sigarilyas gisado</i> Boiled rice Ube halaya	Tokwa balls with gravy Boiled rice Kamote buchi	Fried turcillo <i>Munggo gisado</i> overload Boiled rice <i>Saba con yelo</i>	Spaghetti with chicken meatballs Garlic toast Pineapple– orange juice	Pininyahang manok Fried lumpiang ubod Boiled rice Crema de fruta

### The Philippines' Future is Today's Filipino Children

By Maja Bethzaida S. Decena

Dr. Jose Rizal, the Philippine national hero said, "The youth is the hope of our future." Each Filipino child, regardless of gender or economic background, is vital in the development of our country. Investment in children's health and nutrition yields positive impact on Filipino society and the Philippine economy.

Most people take action to improve nutrition because it is a fundamental human right, ethical, and national security concern (World Bank, n.d.).

### Unaddressed Malnutrition has High Cost

Lotta Sylwander, the UNICEF Philippines Country Representative, suggested politicians review the report on the costs of undernutrition and "be bothered...be concerned about the massive losses of money, of capacity, of moving the country forward." Inadequate nutrition does not only kill children but also cost the Philippine economy. UNICEF (2018) reported that the Philippines loses PhP 220 billion each year due to high prevalence of child malnutrition. These losses can be used for programs and projects that can improve the Filipinos' social welfare.

Children who remain stunted at age five are more likely to drop out of school and repeat grade levels (Save the Children, 2016). There is 33 percent higher chance for children who are stunted before age five to repeat grade levels than those who are not. Child stunting that caused grade level repetitions cost families and government a total of PhP 1.23 billion each year. Philippine government shoulders 57 percent of this cost (Save the Children, 2016). The overall cost of malnutrition each year is 1.5 percent of the Philippine GDP (UNICEF, 2018).

### Return of Investment in Nutrition Outweighs the Cost

The country needs PhP 32.82 million each day to aid the 3.28 million stunted children, 6 to 47 months old (ENNS, 2018). A pack of complementary food that these children need daily only cost PhP 10. At most, 120 feeding days are required to ultimately make a difference in nutritional status of children (DSWD Guidelines on Supplementary Feeding).

The report of UNICEF (2018) includes a benefit-cost ratio of investing in child's nutrition. The Philippines can expect USD 12 in benefits for each one USD of cost in addressing undernutrition. Also, dollar spent to avert stunting below 24 months old children can save USD 102.99 in education, health, and productivity cost (Hodinott, Alderman, Behrman, Haddad, & Horton, 2013). Former National Nutrition Council Executive Director Maria Bernardita Flores said that there is an estimated PhP five billion nutrition investment needed every year for implementing key interventions, especially during the first 1,000 days of life of Filipino children.

### Improved Nutrition Facilitates Economic Growth and Increases Productivity

Pieces of evidence show that there is two-way relationship between economic growth and nutrition. Economic development can contribute a modest pace in the improvement of nutrition. The basic building block of human capital is proper nutrition. This capital contributes to overall economic development. Equitable and sustainable growth in developing countries such as ours will help in making Philippines into a developed country. Well-nourished Filipinos are drivers of stronger economic growth.



### Addressing Malnutrition

The Philippine Plan of Action for Nutrition (PPAN) 2017-2022 seeks to address malnutrition in the country. PPAN has 12 programs and 46 projects. Eight of these programs are nutrition-specific, three are enabling support programs, and one is nutrition-sensitive. Among the projects are the enforcement of milk code, rice fortification with iron, supplementary feeding of school children, and school crop production for supplemental foods.

The programs and projects of the government for nutrition are investments for the future. Poor nutrition throughout childhood is detrimental. It can impair children for their lifetime and strengthens the vicious cycle of poverty and malnutrition. Undernourished children who receives lower human capital investment and have poorer health in adulthood will earn lower wages (Belli, Bustreo, & Preker, 2005). This condition, in turn, will also affect the next generation of Filipino children and future economic growth of the country.

Addressing malnutrition is not just about human rights; it is also an economic concern. Nutrition specific projects are being implemented in schools to reach malnourished children. These programs and projects for children can result in productive and better-educated adults and produce favorable demographic changes in the Philippines (Belli, Bustreo, & Preker, 2005). Children are the future workforce and consumers who will generate tax revenue to drive the Philippine economy. Children's overall well-being is a valuable economic investment.

### Nutritional Needs of School-age Children By Andrea Marie P. Malit

School-age children are between 6 to 12 years of age. They have a steady but slow rate of physical growth while muscular strength, motor coordination, and stamina increase progressively. As a result, their nutritional needs are high and critical.

Common nutritional problems of school-age children shifted from problems of nutrient deficiencies to problems of excess nutrition. According to the DOST-FNRI 2018 Expanded National Nutrition Survey (ENNS) results, rates of stunting among school-age children have decreased from 31.1% to 24.5% but still a public health problem of high severity. Moreover, overweight and obesity prevalence among school-age children has continued to rise over the years reaching 11.7% from 8.6% in 2015. The prevalence of obesity is increasing and the beginning of eating disorders can also be detected among children in this age group.

Eating problems faced by school-age children make them prone to other nutritional problems such as irondeficiency anemia, undernutrition, overweight and obesity, and dental caries. These nutritional problems may be attributed to the eating behaviors formed during this age such as skipping meals, poor appetite, having sweet tooth, and liking of fast food. Thus, it is especially important for school-age children to have adequate nutrition and healthy eating behaviors that can help prevent immediate health problems as well as promote healthy lifestyle, which in turn may reduce risk of the child developing chronic diseases later in life.

Providing children with adequate nutrition during their school-age years is a good way to ensure that they are able to reach their full potential for health, growth, and development. At this stage, they are more prone to malnutrition than adults, thus, their nutrient intakes should reach the recommended levels. The essential nutrients for optimal nutrition are:

### I) Energy

From pre-school to school-age, energy requirements of children per body weight decrease due to the slowing but steady growth rate. However, school-age children are bigger and more active making them need more energy for play and school work. Energy in the diet must meet recommended intakes in order to spare protein from being used and avoid excessive weight gain. The Philippine Dietary Reference Intakes (PDRI) developed by the Department of Science and Technology-Food and Nutrition Research Institute (DOST-FNRI) recommends 1600 kcal and 1470 kcal for male and female children aged 6-9 years old, respectively. The dietary energy may come from food sources rich in carbohydrates, protein, and fat.









### 2) Protein

Protein plays an important role in tissue repair and growth of a child. Consuming inadequate amounts of protein may lead to protein deficiency and when prolonged. It may also result in permanent impairment of physical and mental growth. The recommended protein intakes for male and female school-age children ages 6-9 years old are 30 and 29 grams, correspondingly. These intakes are generally met through a regular intake of foods of animal origin, such as meat, fish, poultry, eggs, and milk and milk products. Other protein sources of plant origin such as tofu, legumes, nuts and beans may also be consumed as alternatives.

### 3) Calcium

Poor eating habits formed during this age may cause nutritional deficiencies among children, especially calcium deficiency. At this age, children tend to drink sugar-sweetened beverages which are high in sugar but low in essential nutrients. School-age children are less likely to drink milk which is a good source of calcium needed for building and maintaining strong bones. A glass of milk already provides almost half of the recommended calcium intakes of 700 mg for children ages 6-9 years old.

### 4) Iron

Iron is involved in numerous bodily functions. It is an essential part of the hemoglobin, a carrier of oxygen in the bloodstream, and is needed for growth and development as well as prevention of anemia among children. Iron-deficiency anemia (IDA) is a common nutrient deficiency in children affecting 16.8% of schoolchildren based on the 2018 ENNS which increased from 14.0% in 2015. IDA may cause adverse effects on the behavior and mental performance of children. The dietary allowance for iron recommended by the PDRI is 10 and 9 grams for male and female school-age children ages 6-9 years old, respectively. Iron requirement for females, however, is significantly higher than males as they age in preparation for the onset of menarche. Excellent sources of iron include meats, internal organs, poultry, fish as well as dark, green, leafy vegetables like s*aluyot, malunggay, camote tops,* and *kangkong*.

### 5) Zinc

Zinc is also an important nutrient needed for growth because of its role in tissue and protein synthesis and carbohydrate and energy metabolism. Deficiency in zinc intakes would lead to impaired growth and development, delayed sexual maturity, loss of appetite, and impaired immune function among children. Dietary allowances of zinc based on the PDRI for school-age children ages 6-9 years old are 5.1 and 5.0 mg, respectively, for males and females. Good sources of zinc are red meats, egg, and seafood.

The Department of Science and Technology-Food and Nutrition Research Institute (DOST-FNRI) developed the *Pinggang Pinoy*® which adequately translates the nutritional requirements of children into meals. This nutrition tool may serve as guide in preparing the right kind and amount of food per meal to provide nutritious and affordable meals for healthier kids.



### Simple ways to develop healthy eating among children By Idelia G. Glorioso

Feeding program is done in public schools to address undernutrition and short term hunger among school children. It also intends to increase classroom attendance and improve the children's health and their nutritional values and behavior.

Although there is a feeding program for undernourished children that is done in school, parents play a big role in improving the health and nutritional status of their children. Parents should bear in mind that good nutrition should start at home. Children should learn to eat a variety of foods while they are still young. Parents should set the example by doing what they preach in so far as eating habits are concerned. They should set a good example by eating a variety of foods. Remember, children are great imitators and observers.

Here are simple tips that parents, particularly mothers and caregivers, can follow to develop good eating habits of children:

- Good food habits should start while children are still young. Serve family meals that include foods from the Pinggang Pinoy to familiarize the child with a variety of foods needed throughout life. Pinggang Pinoy is a new, easy-to-understand food guide that uses a familiar food plate model to convey the right food group proportions on a per-meal basis to meet the energy and nutrient needs of Filipino children. The plate has divisions that represent recommended proportions of foods belonging to the three food groups namely: Go, Grow and Glow. Half of the plate represents Glow foods consisting of fruits and vegetables. One sixth of the plate shows proportion for Grow foods such as meats, eggs, poultry, fish, beans and legumes. One third of the plate is Go foods comprising rice, corn, bread, oatmeal, bread and rootcrops.
- Eating regularly helps develop a child's appetite and prevents meal skipping.

- Limit snacking. Make sure that there is no eating of big snacks after school or filling-up on juice, soda, or even milk before dinner.
- If the child dislikes a certain type of food, cut this into bite-size pieces and combine with the child's favorite food.
- Never force a kid to eat. This will only increase dislike for the food.
- If the kid dislikes veggies, serve them at the early part of the meal when he or she is hungriest.
- Be artistic. Make dishes enticing. Colorful foods presented in different shapes are more appealing to kids.
- Involve the child in planning and preparing meals. This will encourage kids to taste the food they helped prepare.
- Use new recipes every now and then. Kids get bored when they eat the same food prepared the same way every time.
- Food is needed for nutritional health and should not be given as a reward or kept from the child as punishment.
- A relaxed and sociable atmosphere helps make mealtime pleasant and enjoyable besides helping one to digest food better.

According to the 2012 Nutritional Guidelines for Filipinos developed by the Technical Working Group headed by the Food and Nutrition Research Institute of the Department of Science and Technology (DOST-FNRI), eat a variety of foods everyday to ensure that all nutrients are provided in proper amounts and for a balanced diet.



# Farm to Table: Nourishing the Next Generation

By Maja Bethzaida S. Decena





The practice of healthy eating starts at a young age. It dictates the children's health and dietary habits for life. Nourishment at early age has a profound effect on child's growth and development. One way to encourage healthy eating among school children is through school gardens

### School-based feeding program

Since 1997, the government, through the Department of Education (DepEd), initiated school feeding program, which aimed to address short term hunger among public school children. The feeding program campaign changed throughout the years. Today, it focuses on undernutrition prevalence reduction among school children (Agdeppa et al., 2018).

School feeding has positive impact on children's school performance, weight, and height. Launched in 2007, Gulayan sa Paaralan Program intends to complement the supplementary feeding program and raise awareness on the health and nutritional benefits of vegetables. Nonetheless, crops harvested are not fully integrated into School-Based Feeding Program – SBFP (Agdeppa et al., 2018).

### Benefits of School Gardening

School garden helps children to witness how food is grown (from farm to table). Children who have hands-on nutrition learning eat three times more vegetables and fruits that those who do not (Tisch Center for Food, Education, and Policy, 2017). School gardens compared to lectures and worksheet gives an experiential, hands-on learning environment. Kids were able to smell the leaves of the plants and have their hands dirty while planting and harvesting. These experiences of working in the garden are world activity that engages children and encourages them to explore and reason (Shafer, 2018).

It takes 35 to 50 hours of nutrition education each year to completely change children's food preferences. Most children receive an average of 3.4 hours of nutrition education yearly. Existence of school garden encourages educators to make nutrition education a consistent part of school children's educational experience (Ringstrom, 2018).

Spending days to months growing their food, kids will feel proud and connected to their garden. Children's repeated exposure to tilling school gardens and growing their food build emotional connection to food. It is vital for behavior change. This change is the key for kids to try new dishes with open mind (Shafer 2018).

For decades, the government is battling against all forms of malnutrition. There are eight programs under the Philippine Plan of Action for Nutrition (PPAN) that the government is implementing. One of the programs is the National Dietary Supplementation Program. This program encompasses five projects/components (NNC, 2017):

- Supplementary feeding of pregnant women: aims to attain optimum growth and development of fetus;
- Complementary feeding of children 6-23 months old: aside from breast milk, solid food is introduced to the child's diet;
- Supplementary feeding of children 24-59 months old;







- Supplementary feeding of school children: this focuses on undernourished school children; and
- Food plants for producing supplementary foods: aims to complement SBFP.

These projects are designed for children's growth and development starting from fetal stage. Proper nourishment is vital for every child's development. Amid innovation in education, there is still some low-tech changes like school gardens that can aid children's development (both physically and mentally). This low-tech change complements other programs on nutrition. Proper nourishment

among children supports their social and academic success. Integrating nutrition education and SBFP with school gardening builds connections and behavioral change for children to improve their food preferences toward healthier eating habits.

# Food Safety Tips for Food Handlers

By Shannen Faye Q. Arevalo

Supplementary feeding helps food-insecure families by providing adequate nutrition especially to undernourished children. Successful implementation of feeding programs comes with proper food handling as food safety is the responsibility of everyone especially food handlers working in school feeding programs. To prevent outbreaks of food-borne diseases in schools, here are a few tips:

#### A. Buying food

- I. Always follow a schedule of purchasing raw materials to ensure freshness of ingredients.
- 2. Always check food labels and expiration dates.
- 3. Fish, meat & poultry must smell fresh with no visible signs of discoloration.
- 4. Vegetables and fruits should not have bruises or discoloration.
- 5. Avoid buying dented, swollen, and or leaking canned containers or other similar packaging.

### **B.** Preparing food

- I. Always wash your hands before and while preparing raw food.
- 2. Preparation area must be cleaned, well-maintained and pest-free.
- 3. Separate raw meat, fish and poultry from cooked food.
- 4. Use separate utensils (chopping board, knife, etc.) for raw and cooked food when preparing foods.
- 5. Use separate towels for specific working stations.
- 6. Work attire
  - · Keep clothes clean to prevent carrying contaminants into the kitchen.
  - $\cdot$  Use different apron when working in different stations to prevent cross contamination.
  - Wear hair net, face mask and use disposable gloves when handling raw and cooked foods. Change disposable gloves regularly.
  - $\cdot$  Use non-slip and full covered shoes that protect you from burns, spills and splatters.
- 7. Hygiene practices
  - $\cdot$  Do not handle foods if you are sick.
  - $\cdot$  Never cough or sneeze over the food.
  - $\cdot$  Wash hands with soap for at least 20 seconds before and after handling foods.
  - $\cdot$  Keep the working surfaces and countertops clean with hot and soapy water or with any anti-bacterial sanitizer.
  - Do not wear jewelries, nail polish and or artificial fingernails as they might contaminate the food.
  - $\cdot$  Cover all cuts and wounds with bandage.



Source: Academy of Nutrition and Dietetics

### C. Storing Food

- I. Leftovers should be placed in the refrigerator within 2 hours of being cooked.
- 2. Store raw food at the bottom of the refrigerator to avoid its juices from dripping to other food.
- 3. Cover leftover ingredients, wrap them in an airtight packaging, or seal them with plastic wrap.
- 4. Refrigerator temperature should be below 41 °F (5° C) and freezer temperature should be 5 °F (-15 °C).
- 5. Label ingredients with name, date, and time of purchase before storing. Apply First in First Out (FIFO) and First Expiry First Out (FEFO).
- 6. Only take out refrigerated raw food when needed.

#### D. Cooking of food

**Temperature and Time** 

- I. As microorganisms grow in a "Temperature Danger Zone" of 40 °F to 140 °F (4 °C to 60 °C), avoid leaving unattended food in the open. Don't keep food exposed at Temperature Danger Zone for more than 4 hours because that is enough time for the microorganisms to multiply in the food.
- 2. Do not set out eggs, meat, poultry, seafood, or milk at room temperature for long.
- 3. Poultry meat should be cooked at 165 °F (74 °C), while beef and pork at 145 °F, and ground meat at 160 °F (71 °C). Eggs should be cooked until yolk and white are firm. Seafood should be cooked at 145 °F (63 °C) or until flesh is opaque or no longer transparent.

#### E. Serving food

- I. Cooked food should be consumed within 2 hours.
- 2. Before and after portioning of food, temperature and time of dishing out should be recorded.
- 3. Use different set of utensils for cooking and serving.
- 4. The table that will be used for serving should be wiped of any dirt or covered with table cloth.
- 5. Make sure children wash their hands before they eat.

Feeding rooms should always be cleaned to prevent the presence of pests. Wastes should be segregated and there should be sanitation plan for all implementers. Let us all take extra measures to follow these reminders to prevent spread of harmful bacterias that can cause food poisoning.



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