

IMPLEMENTING GUIDELINES ON OPERATION *TIMBANG Plus* (*OPT* +)

Developed by the Inter-agency
Technical Working Group on Child Growth Standards

Approved for nationwide implementation by the NNC Governing Board
pursuant to NNC Governing Board Resolution No. 2, Series 2012

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IMPLEMENTING GUIDELINES ON “Operation Timbang Plus”

As of 12 January 2012

I. Rationale

Growth is the increase in the size as a result of the child’s *intake* of food and maintenance of a child’s overall health and well-being. Increments in weight and height or length at rates considered acceptable based on growth standards thus indicate good nutrition and health well-being.

In the Philippines, there are three major activities where growth assessment of children ages 0-71 months is done. These include the: a) National Nutrition Survey of the Department of Science and Technology (DOST), b) the health center- or facility-based growth monitoring and promotion services provided by health workers, and c) Operation *Timbang* Plus or OPT Plus done every first quarter of the year in communities nationwide. While differing in many respects including objectives, they provide important information on the nutrition situation of the population useful for nutrition program planning and policy formulation and important nutrition information about a child for prevention or management of malnutrition.

Table 1. Comparison of Anthropometric Activities in the Philippines

Item	National Nutrition Survey (NNS) – anthropometric component	Growth Monitoring and Promotion (GMP)	Operation Timbang Plus (OPT Plus)
Description	<ul style="list-style-type: none">• A population-based survey to assess the nutritional status of nutritionally at-risk groups including 0-5 and 6-10 years old children using sample children selected through a multi-stage stratified sampling design and updated every three years	<ul style="list-style-type: none">• Serial monitoring of a child’s weight in the Barangay Health Center (BHC) or Rural Health Unit (RHU) aided by the ECCD card	<ul style="list-style-type: none">• Annual mass weighing of all preschoolers 0-71 months old in a community to identify and locate the malnourished children
General Objective	<ul style="list-style-type: none">• To update the official statistics on the Philippine food, nutrition and health situation to guide formulation of food and nutrition policies as well as intervention and related development programs.	<ul style="list-style-type: none">• To detect early any deterioration in the nutritional status of a child for immediate counseling and intervention	<ul style="list-style-type: none">• To generate data on the nutritional status of children in a barangay, municipality or city• To locate underweight children and• Guide nutrition program planning at the local level management and evaluation of local nutrition programs

Item	National Nutrition Survey (NNS) – anthropometric component	Growth Monitoring and Promotion (GMP)	Operation Timbang Plus (OPT Plus)
Specific Objective	<ul style="list-style-type: none"> • Provide national and sub-national prevalence of malnutrition among children, 0-5 and 6-10 years old • Monitor changes in the nutrition situation 	<ul style="list-style-type: none"> • Provide immediate action or intervention to prevent worsening of child's nutritional status 	<ul style="list-style-type: none"> • Locate families with preschoolers who are underweight, severely underweight and overweight • Identify and quantify PSC who are underweight, severely underweight, overweight, stunted, severely stunted, tall, wasted, severely wasted and obese needing immediate assistance • Determine priority areas and individuals for program planning purposes • Provide basis for the assessment of local nutrition programs • Encourage parents or guardians or caregivers to have their children measured for weight and height regularly
Period/ Schedule	<ul style="list-style-type: none"> • Every 5 years • Updating every 2 years in between the NNS schedule 	<ul style="list-style-type: none"> • Every month for 0-23 months old preschoolers and malnourished 0-71 mos.old children • Quarterly for 24-71 months old 	<ul style="list-style-type: none"> • 1st quarter of every year
Sampling Design	<ul style="list-style-type: none"> • Stratified two-stage sampling design, barangay as primary sampling unit and individual as secondary sampling unit 	<ul style="list-style-type: none"> • all children participating in health center activities, i.e. well child, IMCI, Garantisadong Pambata 	<ul style="list-style-type: none"> • Complete enumeration

Item	National Nutrition Survey (NNS) – anthropometric component	Growth Monitoring and Promotion (GMP)	Operation Timbang Plus (OPT)
Sampling coverage	<ul style="list-style-type: none"> Nationwide Randomly sampled HH per area 	<ul style="list-style-type: none"> All 0-71 months old preschool children in the barangay 	<ul style="list-style-type: none"> All households with 0-71 months old preschool children in the barangay
Data collector	<ul style="list-style-type: none"> Data collectors/enumerators 	<ul style="list-style-type: none"> Midwife or nurse assisted by the trained BNS and/or BHW 	<ul style="list-style-type: none"> OPT Plus Team members (Midwife, Barangay Nutrition Scholar, Barangay Health Worker, etc.)
Indices	<ul style="list-style-type: none"> Weight-for-age Height-for-age Weight-for-height 	<ul style="list-style-type: none"> Weight-for-age Height-for-age Weight-for-height 	<ul style="list-style-type: none"> Weight-for-age Height-for-age Weight-for-height
Uses	<ul style="list-style-type: none"> For setting objectives, reduction targets (MTPPAN, NOH) For monitoring the MDGs For policy formulation 	<ul style="list-style-type: none"> To detect deterioration in the health and nutritional status of the child Basis for counseling of parents Help identify intervention needed by the child 	<ul style="list-style-type: none"> For planning at the barangay, city/municipal levels For prioritization of assistance by provinces, regions, national-based NGOs and other partners
Users	<ul style="list-style-type: none"> National government agencies Researchers Academe NGOs & private institutions Policy Makers Local government units (LGUs) 	<ul style="list-style-type: none"> Midwife BNSs BHWs Parents 	<ul style="list-style-type: none"> National government agencies Development partners Researchers Academe NGOs & private institutions Policy Makers Local nutrition committees
Administrative data level	<ul style="list-style-type: none"> National Regional Provincial* <p><i>*Depends on funding</i></p>	<ul style="list-style-type: none"> Individual child 	<ul style="list-style-type: none"> Barangay Municipal City Provincial * <p><i>* assuming at least 80% OPT coverage of population</i></p>

This guideline, herein referred to as Operation *Timbang* Plus, aims to provide specific guideposts on what, why, when, who and how the new Operation *Timbang* Plus shall be conducted, processed, analyzed and shared by the Nutrition Committees to help generate timely, accurate and important nutrition information about children 0-71 months old in aid of local planning and policy formulation of and in support of the local Plan of Action for Nutrition.

The revised OPT Plus has new features different from the previous OPT Guidelines of 2004 such as:

1. Inclusion of length and height measurement because using weight and length or height in combination with the child's age, allows a more comprehensive assessment of a child's nutritional status;
2. Improved efforts of the OPT Plus Team to come up, through a group coordinated effort, with only one set of OPT Plus data, to be used by all functionaries of the LGU;
3. Increased efforts of local nutrition committees to jointly discuss and analyze the OPT Plus results to plan possible course of action that will prevent/address the malnutrition problem in the locality; and
4. Based on the CGS, the single international standard that represents the best physiological growth for all children from birth to five years of age and establish the breastfed infant as the normative model for growth and development as adopted by the Philippines through NNC Governing Board Resolution No. 2, S 2008, "Adoption of the New WHO Child Growth Standards for use for Children 0-5 years old in the Philippines".

II. Programmatic Developments

The conduct of OPT starting from the early '70s was regularly done by local government units through the local nutrition committees. It is an integral part of the nutrition committees' annual nutrition planning activity, and monitoring and evaluation of the effectiveness of nutrition programs.

Several growth standards had been used over the years. They are namely: a) the Gomez standard which classified children as normal if weight is 90% and above of the standard, 1st degree malnourished if weight is 75-90% of standard, 2nd degree malnourished if weight is 60-75% of standard and or 3rd degree if the weight is 60% and below of standard; b) the Philippine Reference Standards (PRS) developed by the FNRI-DOST, in coordination with the Philippine Pediatrics Society (PPS) adopted in 1992; and c) the International Reference Standards adopted in 2003.

The IRS was the first reference used in the country which allowed Filipino children to be compared with children from different parts of the world. The use of the IRS as a tool to determine nutritional status of Filipino children was approved with the adoption of NNC Governing Board Resolution No. 5 Series 2002, "Adaptation of the International Reference Standards (IRS) in Determining the Nutritional Status of Filipino Children" in March 2002. The approval was made for the following reasons: a) the IRS reflects the maximum growth potential of children, thus, it challenges any child to compete globally rather than nationally; b) the IRS provides a more realistic and accurate estimate of the prevalence of undernutrition, thus, providing greater impetus for policy level action; and c) the IRS focuses on preventive and promotive programs rather than rehabilitative.

A Task Force on OPT was formed in 2003 to revise the Operation Timbang (OPT) guidelines and to act on issues arising from the shift in the use of standards. The Task Force was composed of representatives from the DOH-National Center for Disease Prevention & Control (NCDPC), FNRI-DOST, and Council for the Welfare of Children (CWC)–Office of the President, Makati Health Department Nutrition Office (local government unit), and the National Nutrition Council (NNC) Secretariat at Central Office, the NCR and Region IV.

Simultaneous with the country's adoption of the IRS, a multi-growth reference study was initiated by the WHO to review the use of existing standards and current scientific evidence. Results of this study prompted the World Health Organization (WHO) to advocate the use of the new Child Growth Standards including its launching in the East-Asia Region held in the Philippines in 2006. Upon recommendation of the delegation who attended the launch, the NNC Technical Committee created the Technical Working Group (TWG) on Child Growth Standards to do further study and eventually, facilitate its nationwide implementation. Said TWG is composed of members from the Department of Health (DOH)-Nutrition Center for Disease Prevention and Control, Department of Social Welfare and Development (DSWD), Department of the Interior and Local Government (DILG), Department of Education (DepED), FNRI-DOST, PPS, Council of Deans and Heads in Nutrition and Dietetics (CODHEND)/ UPLB, *Koalisyon para Alagaan at Isalba and Nutrisyon* (KAIN), Integrated Midwife Association of the Philippines, Inc. (IMAP), representatives from the local governments of Makati City and Province of Laguna and NNC.

Upon recommendation of the TWG and endorsement by the NNC Technical Committee based on the following provisions, the NNC Governing Board approved Resolution No. 2, Series 2008 "Adoption of the New Child Growth Standards for Use for Children 0-5 years old in the Philippines" was adopted.

1. The new WHO Child Growth Standards show how every child in the world should grow.
2. Every child in every part of the world has the potential to grow and develop as described in these Standards as long as his and her basic needs are met.
3. The new standard is a technically robust tool to measure, monitor and evaluate the growth of all children worldwide, regardless of ethnicity, socio-economic status or type of feeding.
4. The Standards are based on the breastfed infant as the normative growth model.
5. The Standards is an effective tool for detecting obesity as it allows for earlier diagnosis of excessive weight gain.
6. The Standards informs people of what constitutes good nutrition, health, and development.

III. Objectives of the Operation Timbang Plus

General:

To generate data on the nutrition situation of children as input to community nutrition assessment, nutrition program planning, and monitoring and evaluation of local nutrition programs.

Specific:

1. to identify and quantify preschoolers who are malnourished
2. to locate families with preschoolers who are malnourished
3. to determine priority areas and individuals for nutrition interventions
4. to provide basis for the planning and assessment of local nutrition programs

IV. Uses of OPT Plus Results

At the barangay level, the mass weighing of children at the start of every year can help locate and identify preschoolers who are wasted, stunted, underweight or overweight. Through the mass weighing, the families of underweight children can be identified and summarized to make the masterlist of priority beneficiaries for nutrition and nutrition-related services. This allows the community to determine the magnitude and prevalence of malnutrition.

The children's nutritional status data, a barangay map and the results of the annual family survey of the Barangay Nutrition Scholar (BNS), health and nutrition workers can develop a barangay spot map identifying the specific location of underweight children and problem tree of malnutrition can be developed by the Barangay Nutrition Committee (BNC). These are tools which help BNCs set priorities and targets, nutrition objectives, and select and design appropriate nutrition projects for funding by the barangay and its partners.

Measuring the length of children below 24 months and height among children 24 months and above allows the community to determine the degree of stunting (shortness) and wasting (thinness) in a population. These provide important insights as to the nature of malnutrition in the area. A high prevalence of stunting in a community indicates the presence of more severe and chronic form of undernutrition, which may be due to long-term deprivation of food and overall poor health. A high prevalence of wasting in a community may indicate short-term/ acute shortage of food as in the cases of calamities and widespread infections in the immediate past. If not addressed immediately, wasting may contribute to increased underweight and stunting in the community, in the long-term. Areas which have data on length and height of children are thus, in a better position to assess children's growth and select more appropriate interventions.

Nutrition program management also become more guided with the use of several nutrition indices. Data on wasting is an indicator of and allows trending of the seasonality of food shortages and certain illnesses. It allows more sensitive targeting of children who may be selected for supplemental feeding to prevent further undernutrition. Evaluative studies of nutrition interventions also become more

informative with the use of several nutrition indices. Areas with sustained implementation of effective nutrition programs will have reduced stunting prevalence in the long-term.

The results of the OPT Plus from the cities and municipalities is used by the NNC in the identification of the nutritionally depressed municipalities and cities (NDM/Cs). The cities/municipalities (C/M) are ranked using a composite index of: 1) prevalence of underweight using OPT Plus results, and 2) audited per capita income of the C/M provided by the Commission on Audit (COA). The list of top NDM/Cs is used as a tool by various partners as basis for selecting priority areas for projects.

V. Mechanics of Implementation of the OPT Plus

The OPT Plus will be done every first quarter of the year, from January until June. Measurement of weight, length/height of children 0-71 mos. old children shall be done, house-to-house, in the weighing post, or by clustering the children within the community. The growth assessment should cover at least 16.2% of the total population as projected by NSO.

However, for older children enrolled in the day care, DepED supervised schools or private day care schools, measurement shall be done by the OPT Team in coordination with the head of the institution and/or teacher-in-charge, also within the same quarter.

Figure 1 summarizes the various activities relevant to the conduct of OPT Plus in the barangay.

The BNS in tandem with the BHWs and Day Care Worker and School Teacher will consolidate the data collected. The consolidated data written in OPT Forms 1 and 1a will be reviewed and validated by the Rural Health Midwife (RHM) before returning the copy to the BNS who will keep the complete set of the records and ensure that results are shared to the Barangay Nutrition Committee during the 1st quarter meeting. During the meeting, the BNC should identify the priority children and families for nutrition interventions and make sure that they are considered in the budgeting and preparation of the barangay nutrition action plan and eventually, the barangay annual investment plan. The BNC through the BNS should also be able to disseminate the list of priority children and families to other groups implementing nutrition programs in their area.

After concurrence of the BNC to the results, the Barangay Captain should within five (5) working days submit a copy to the City/Municipal Mayor. The Barangay Captain, as BNC Chairperson will sign the OPT Plus Form 1A for submission.

Similar action of review and consolidating barangay submissions shall be done by the C/M Nutrition Action Officer and then presentation of city/municipal OPT Plus results to the C/M Nutrition Committee. The consolidated C/M OPT Plus Report shall be furnished to the Provincial Nutrition Committee through the PNAO where it will again be consolidated together with other municipal OPT Plus reports and submitted to the NNC Regional Office.

Figure 1. Mechanics of OPT Plus in the barangay

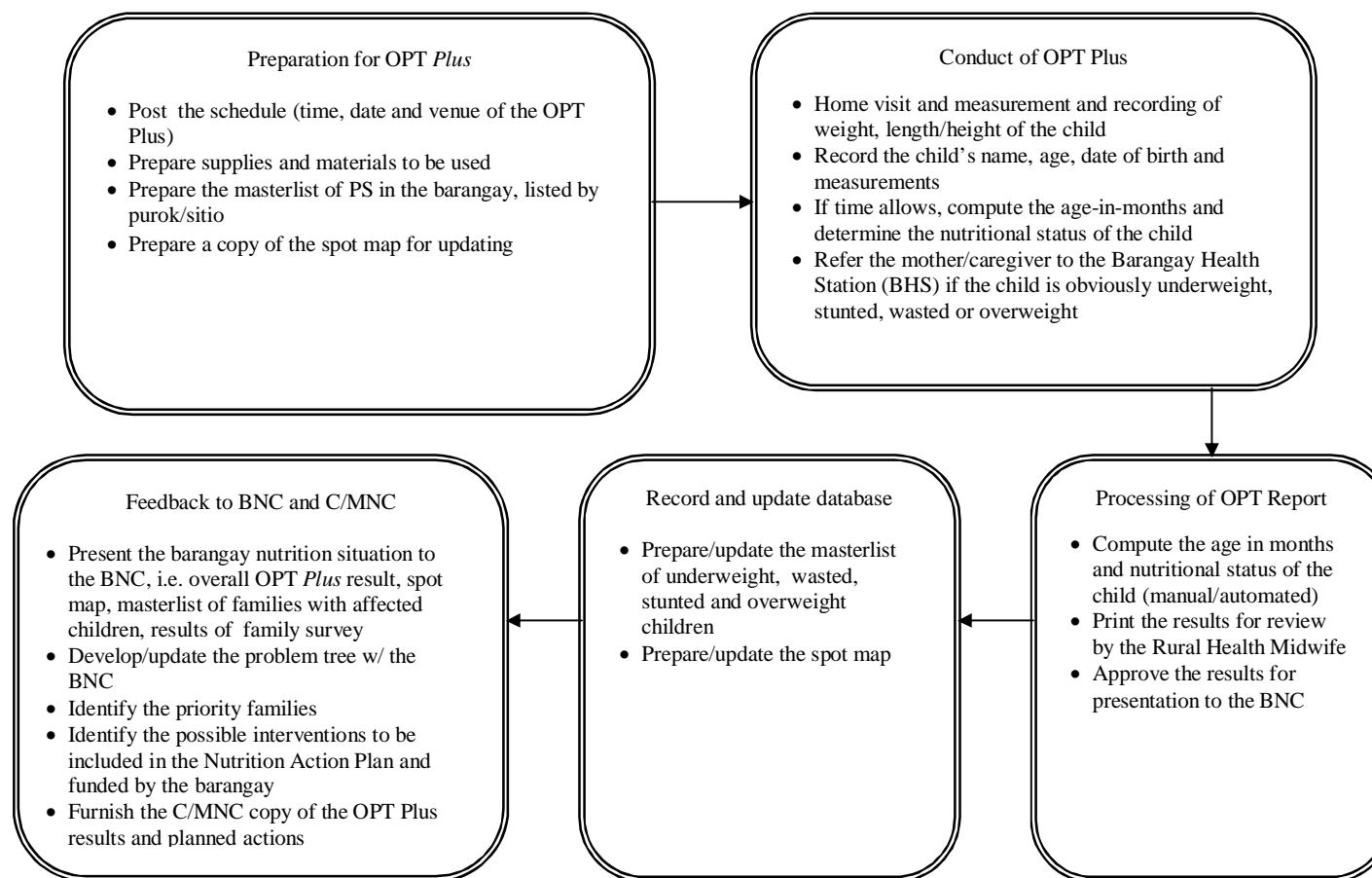
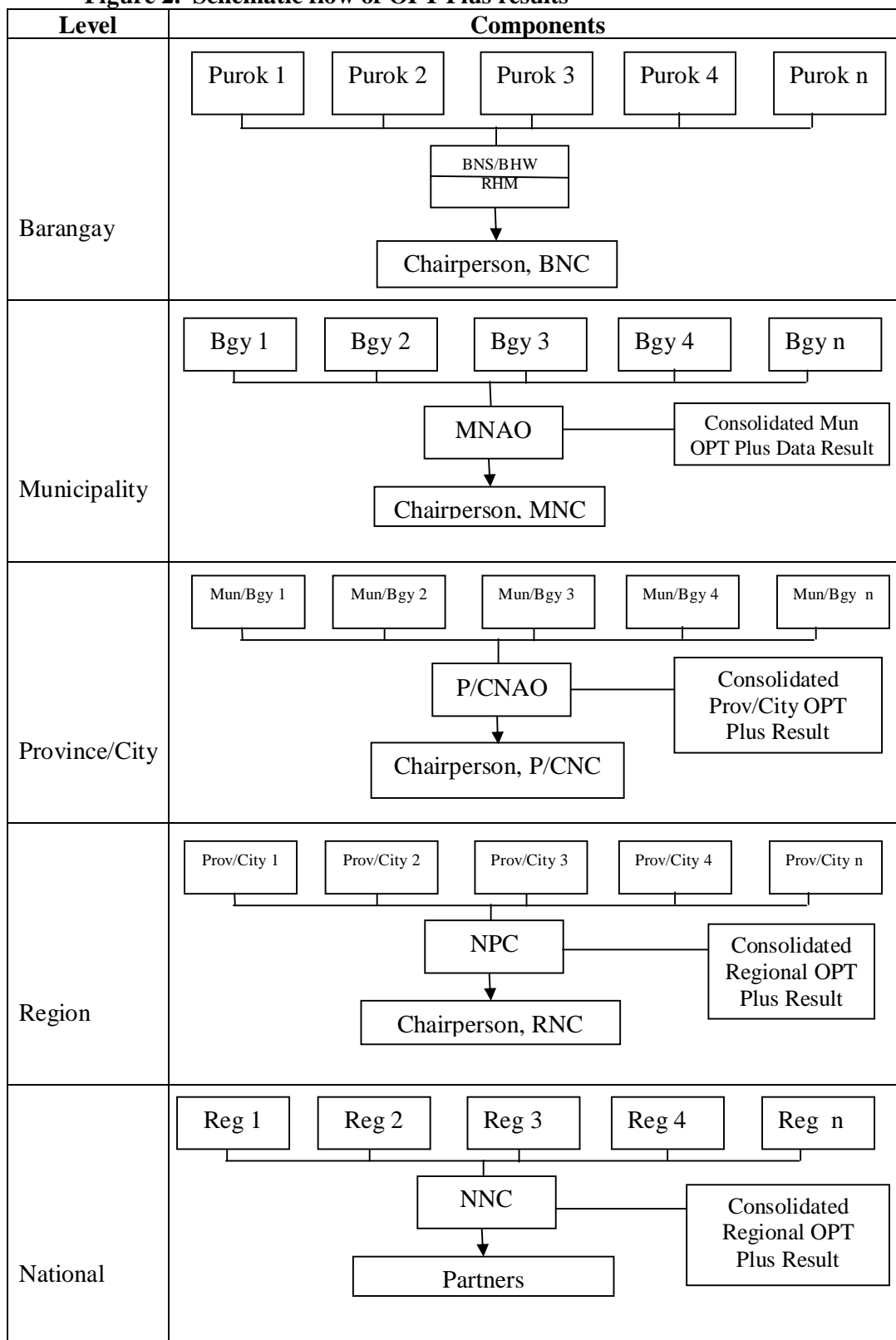


Figure 2. Schematic flow of OPT Plus results



1. Organization and Composition of the OPT Plus Team

The BNC will create an OPT Plus Team composed of 7-9 members. The team will be headed by the Rural Health Midwife, assisted by the BNS and BHWs. The suggested members of the OPT Plus Team can be the Committee Chair on Health and Nutrition, *Sangguniang Kabataan* Chairperson, other BHWs, Day Care Worker (DCW) and Teacher-in-Charge. In ARMM, some of the members of the community health action team (CHAT) may be tapped to join the OPT Plus Team. The team may be assisted by the *purok* or mother leaders, other community leaders, representative/s from civic organizations.

At the city/municipal level, the City/Municipal Health Officer (C/MHO) together with the nutritionist-in-charge/C/MNAO will supervise and monitor the conduct of OPT Plus in the barangays, i.e. availability and use of calibrated measuring equipment, availability of CGS-based weight-for-age, height/length-for-age and weight-for-height/length tables and OPT plus forms and use of correct anthropometric measurement procedure. For highly urbanized cities, the C/MHO will prepare a letter of communication to be signed by the LCE to allow the conduct of OPT Plus in exclusive subdivisions and villages.

2. Roles and Responsibilities of the “OPT Plus” Team

OPT Plus Team Member	Function/Activity
Rural Health Midwife (RHM) as Team Leader <i>Alternately, if there is no assigned RHM in the area for some reasons, the Bgy. Captain may assign the BNS or BHW in the area to lead the team.</i>	<ol style="list-style-type: none"> 1. Organize and convene the “OPT Plus” Team 2. Ensure that the weighing scales are calibrated and the height boards are verified. 3. Inform and coordinate with the Barangay Nutrition Committee (BNC) the scheduled conduct of the OPT Plus by purok or sitios for logistic assistance. 4. Request assistance from the Barangay Captain, president of homeowners association to allow entry/cover exclusive areas for the activity 5. Arrange schedule for nutrition counseling especially among identified malnourished children 6. Measure length of 0-23 months and height of 24-71 months old preschoolers during the conduct of OPT Plus and/or supervise the trained personnel taking the height/length. 7. Validate the OPT Plus results written in OPT Form 1 and 1A before presentation to the BNC

OPT Plus Team Member	Function/Activity
	<ol style="list-style-type: none"> 8. Sign the validated OPT Plus Forms 1 and 1A after review. 9. Assist the BNS/BHW in the presentation of the OPT Plus results to the BNC during the 1st quarter meeting. 10. Ensure the submission of the OPT Plus Form 1A to the City/Municipal Nutrition Committee (C/MNC) within the prescribed schedule.
Barangay Nutrition Scholar (BNS) as coordinator of the <i>OPT Plus Team</i> (if no BNS in the barangay, the BHW will be the OPT Plus coordinator)	<ol style="list-style-type: none"> 1. Coordinate the conduct of the activity. 2. Coordinate with RHM the barangay schedule for calibration of weighing scale and verification of height board before the activity. 3. Prepare the supplies and materials needed during the OPT Plus. 4. Inform the community on the schedule of OPT Plus. 5. Encode the list of the 0-71 months old preschoolers based on the latest re-weighing data in the barangay. The masterlist of the 0-71 months old preschooler should be checked against the updated Family Profile using OPT Plus Form 1. The masterlist of preschoolers should reflect the child's family name, his/her first name, name of father, name of mother, date of birth of child, child's length/height and weight and date of measurement. Arrange the family names of the children in alphabetical order. 6. Prepare the name tag of all 0-71 months old preschooler based on the masterlist/family profile. The name tag will contain the following information: name of child, date of birth, sex, age-in-months, date of measurement, weight and height measurement and name of purok/sitio. The name tags will be arranged according to purok/sitio which will be distributed among the BHWs (per their catchment area or household areas) 7. Measure the preschooler's weight and assist the RHM in taking the length/height of the child and have someone record the measurements.

OPT Plus Team Member	Function/Activity
	<ol style="list-style-type: none"> 8. Calculate the age & determine nutritional status (NS) of preschoolers using the standard tables on Weight-for-Age, Length/Height-for-Age and Weight-for-Length/Height by writing the information temporarily in the child's name tag and then, in the appropriate OPT Form. 9. Alternately, if the team has access to a computer, laptop or notebook, use the automated OPT Plus tool which can be used to compute for age-in-months, nutritional status after providing the name of the child, birthday, date of weighing and sex. The automated OPT tool may be downloaded at www.nnc.gov.ph. 10. Prepare the summary of OPT Plus results using OPT Plus Form 1A. Barangay Tally and Summary Sheet of Preschoolers Measured by Age Group, Sex and Nutritional Status; and OPT Plus Form 1B. List of Priority Preschoolers 0-71 Months old. 11. Have the OPT Plus results validated for accuracy of the result by the RHM/nutritionist-in-charge/nurse using OPT Plus Forms 1 and 1A. 12. Present the counter-checked OPT Plus result during the 1st BNC meeting for inclusion of the priority families in the programs/activities in the barangay. 13. Ask the Barangay Captain, as BNC Chair, to sign the OPT Plus Form 1A to be submitted to the City/Municipal Nutrition Committee (C/MNC). 14. Provide the day care worker and teacher in Kinder from DepED supervised elementary school a copy of the measurements (weight and height) and nutritional status of children
Other team members (DCW, mother leaders, barangay officials) <i>In case, there is no BNS in the barangay, other members may perform the duties of the BNS. Training is necessary for all.</i>	<ol style="list-style-type: none"> 1. Disseminate information regarding the purpose & schedule of OPT Plus to ensure maximum community participation. 2. Arrange facilities for the measurement session i.e. site, weighing scale/s, height board, 2 tables for writing and chairs. 3. Gather preschoolers at the site of OPT Plus. 4. Assist the RHM in measuring the height of the preschoolers. 5. Assist in calculating age of preschoolers (may be done by trained BHWs and DCW)
OPT Plus	Function/Activity

Team Member	
.	<ol style="list-style-type: none">6. Assist in weighing the preschoolers7. Refer the mother/caregiver of the preschool children to the BHC8. Prepare and update the spot map after the validation of the OPT Plus result. (Attachment 12)
Teacher-in-charge	<ul style="list-style-type: none">• Coordinate with the BNS/BHW for the measurement of the children every 1st quarter of the year.• Organize children who have not been measured in the school or Day Care Center wherein they will be measured at home• Maintain a copy of the nutritional status of children ages 5 and below.
Municipal Health Officer (MHO)/ Nutritionist in-charge/C/MNAO/ C/DNPC	<ol style="list-style-type: none">i. Prepare communications for conduct of OPT Plus in private and public schools and Day Care Centers for preschool children aged 36-71 months enrolled in private and Day Care Center schools.ii. Supervise conduct of the OPT Plus in the barangaysiii. Assist the BNS/BHW in the scheduled nutrition counseling sessions for the identified under- or overweight PS. For identified cases of moderately and severely acute malnutrition (M/SAM), ensure that the children are referred immediately to the hospital for medical assessment and management.iv. Collect and validate all submitted barangay OPT Plus results and consolidate for the City/Municipal OPT Plus result.v. Present the consolidated OPT Plus results, including ranking

of barangays according to prevalence of underweight/stunting/wasting; preferably presented with other data in the updated C/M profile.

3. Other activities during and after the OPT Plus

- a. ***Preparation/Updating of Spot Map***. Update the previous spot map showing the houses, roadways and other geographic features of the barangay. This would entail the conduct of:
- an ocular survey of the barangay, noting down new houses, new roadways, or landmarks; and
 - updating/preparing a list of families in the barangay. New families will have to be assigned their respective household numbers.

For barangays without a spot map, selected members of the BNC or volunteers from the barangay, i.e. SK, Barangay Secretary, women groups, may assist the OPT Plus Team in preparing one. On the spot map, the team gives each house a household number. If more than one family lives in one house, the families are given the same household number, but the letters A, B and C are assigned to differentiate each family.

After consolidation of OPT Plus results, houses and families with underweight, severely underweight, wasted, stunted, overweight and obese preschoolers should be indicated on the updated spot map using color-coded markers, i.e. green for normal weight/height, orange for underweight/short, red for severely underweight/stunted, and blue/purple for overweight.

b. Scheduling the Assessment of Preschoolers

- b1. A schedule of OPT Plus, which includes the time, date of weighing and height measurement should be posted in the health center and other strategic places (waiting sheds, chapel, health and nutrition post, sari-sari store, etc). If the barangay has its own public address system, the schedule must be announced every day at least one week before the actual weighing. The proposed venues for the conduct of OPT Plus are in DCC and elementary school especially for enrolled preschool children. It is highly recommended to do a house-to-house visit to ensure that all preschool children are measured especially those who are not enrolled, however the team may still gather the children in a specific place convenient for the families.

Members of the OPT Plus team should ensure that parents and/or caregivers are informed of the exact time and place of weighing.

- b2. On the scheduled day of measurement, the OPT Plus Team goes to the designated place taking along the old spot map (if existing), calibrated salter scale and verified height board, OPT Plus Form No. 1 (names of the families and children are already encoded), age-in-months table, and Weight for Length/Height table for boys and girls, 0-71 months old, rope for hanging of the weighing scale, pencils and paper.

c. Roles of different members during growth assessment

Each member of the OPT Plus Team should have clear and specific assignments during the conduct of OPT Plus:

For example:

1. Member 1 will organize the children in the designated venue (i.e. DCC, elementary school for the children enrolled in kinder).
2. Member 2 will look for the name of the child in the masterlist (OPT Plus Form 1) by noting his/her name, name of mother/father, address, date of birth and ensuring the same information written in the child's name tag.
3. Member 3 will compute for the age in months (AIM) of the child and record it.
4. Members 4 will weigh the preschooler and member 5 will record;
5. Member 6 preferably the RHM assisted by the trained BNS/BHW will measure the length/height.
6. Member 7 who may be the BNS or BHW will assist the RHM in taking and recording the height/length.

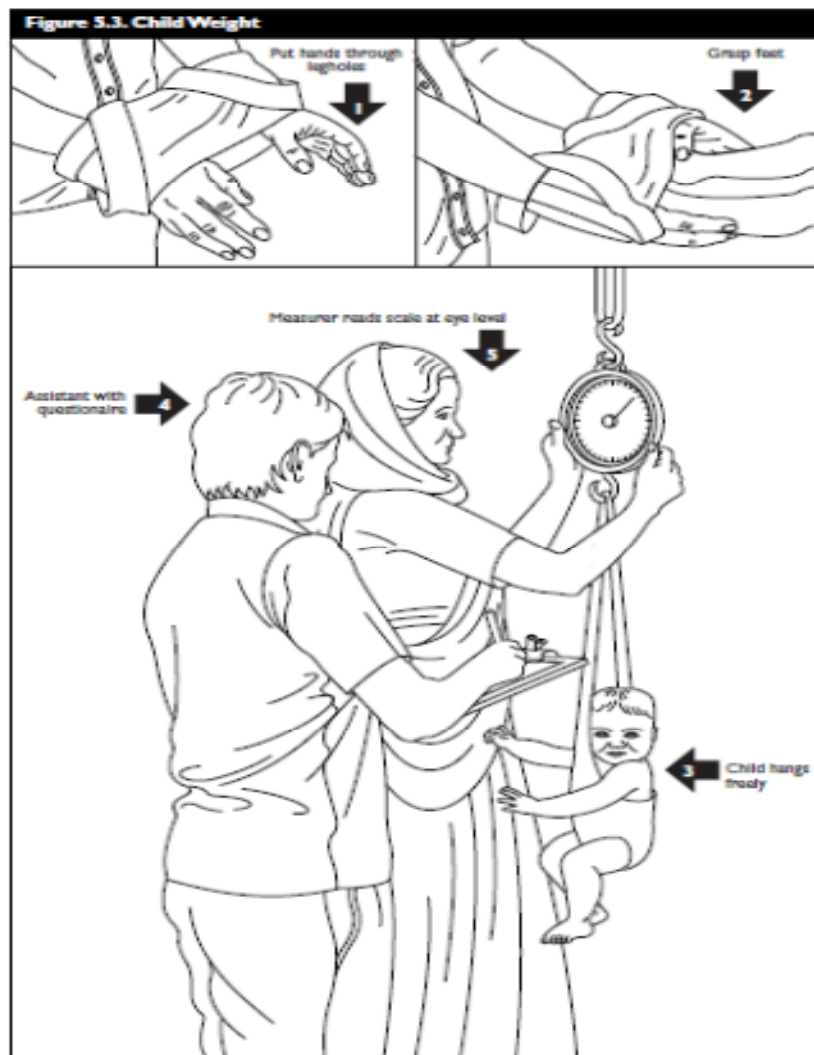
d. Steps in taking weight and height measurement

In weighing the preschoolers, the procedures in proper weighing should be observed.

- (i) Hang the weighing scale from a tree branch, ceiling beam or pole held by two people. Keep the bar or the dial at eye level of the person who will read the weight so that the weight can be read easily and correctly. Ask the mother to remove unnecessary clothing from the child, including shoes and slippers also ensure that the diaper is empty or new. (Attachment 4. Steps on calibration)
- (ii) Attach the empty weighing pants or crib to the hook of the scale and adjust the pointer to zero. Most scales have a knob or screw to make this adjustment.
- (iii) Place the child in the weighing pants or crib with the help of the mother. When using the salter scale, let the mother hold the child. Put your arms

through the leg holes of the weighing pants or crib (Arrow 1). Hold the child's feet and gently pull his/her legs through the leg holes (Arrow 2).

- (iv) Attach the strap of the weighing pants or crib to the hook of the scale. DO NOT CARRY THE CHILD BY THE STRAP ONLY. Gently lower the child and allow the child to hang freely (Arrow 3). The child's feet should not touch the ground.
- (v) Hold the salter scale dial which is at eye level and read the weight to the nearest 0.1kg. WAIT FOR THE NEEDLE TO STOP MOVING BEFORE READING THE WEIGHT (Arrow 5). Relay the child's weight to the recorder/assistant who records the weight in the child's name tag (Arrow 4).
- (vi) Gently lift the child from the weighing pants or crib by his/her body. DO NOT LIFT THE CHILD BY THE STRAP OF THE WEIGHING PANTS OR CRIB.



Source: How to Weigh and Measure Children: Assessing the Nutritional Status of Young Children, UN 1986.

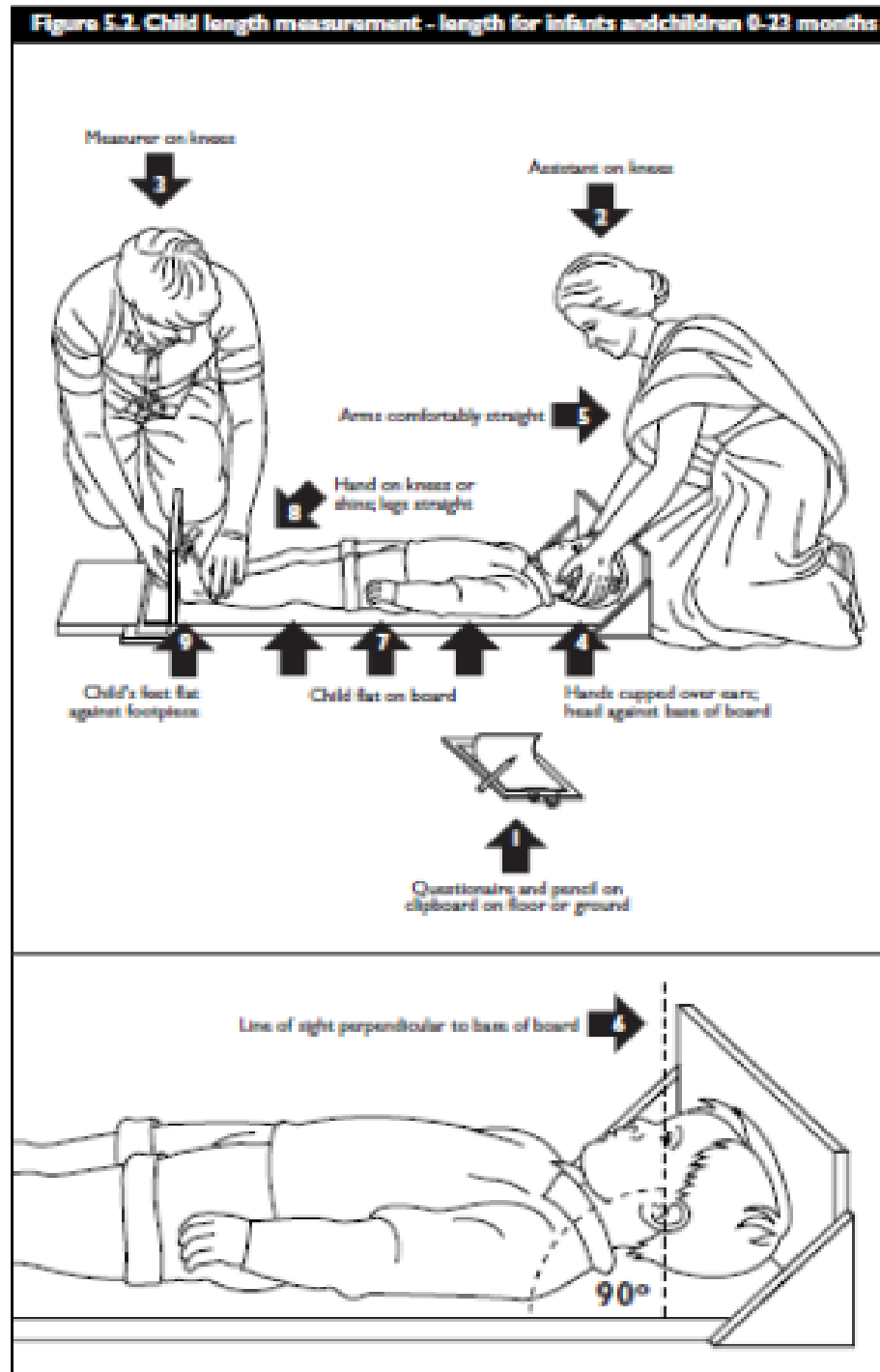
Source: Excerpt from Bruce Cogill. Anthropometric Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Series Title 2 Indicator Guides. June 2001

In measuring the length/height of the preschoolers, proper procedures in measurement should likewise be observed. (*Procedure adopted from Bruce Cogill. Anthropometric Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Series Title 2 Indicator Guides. June 2001*)

Using the length board:

- i. The measurer or assistant will place the measuring board on a hard flat surface, i.e., even ground, floor, or steady table.
- ii. The assistant will place the OPT Plus Form 1 and pencil on the ground, floor, or table (Arrow 1); kneel with both knees behind the headboard if it is on the ground or floor (Arrow 2).
- iii. The measurer will kneel on the right side of the child so that he/she can hold the foot piece with his/her right hand (Arrow 3).
- iv. The measurer and assistant with the mother's help, lay the child on the board by supporting the back of the child's head with one hand and the trunk of the body with the other hand; gradually lower the child onto the board.
- v. The measurer and assistant will ask the mother to kneel close on the opposite side of the board facing the measurer as this will help to keep the child calm.
- vi. The assistant will cup his/her hands over the child's ears (Arrow 4) with his/her arms comfortably straight (Arrow 5). Place the child's head against the headpiece so that the child is looking straight up. The child's line of sight should be perpendicular to the ground (Arrow 6). The assistant's head should be straight over the child's head looking directly into the child's eyes.
- vii. The measurer will make sure the child is lying flat and in the center of the board (Arrow 7). He/She will place his/her left hand on the child's shins (above the ankles) or on the knees (Arrow 8) pressing them firmly against the board. With his/her right hand, place the foot piece firmly against the child's heels (Arrow 9).
- viii. The measurer and assistant will check the child's position (Arrows 1-9). Repeat any steps as necessary.
- ix. The measurer will check if the child's position is correct, read and call out the measurement to the nearest 0.1 cm. Remove the foot piece and release his/her left hand from the child's shins or knees.
- x. The assistant immediately release the child's head, record the measurement, and show it to the measurer.

- xi. The measurer will check the recorded measurement on the OPT Plus Form 1 for accuracy and legibility and instruct the assistant to erase and correct any errors.



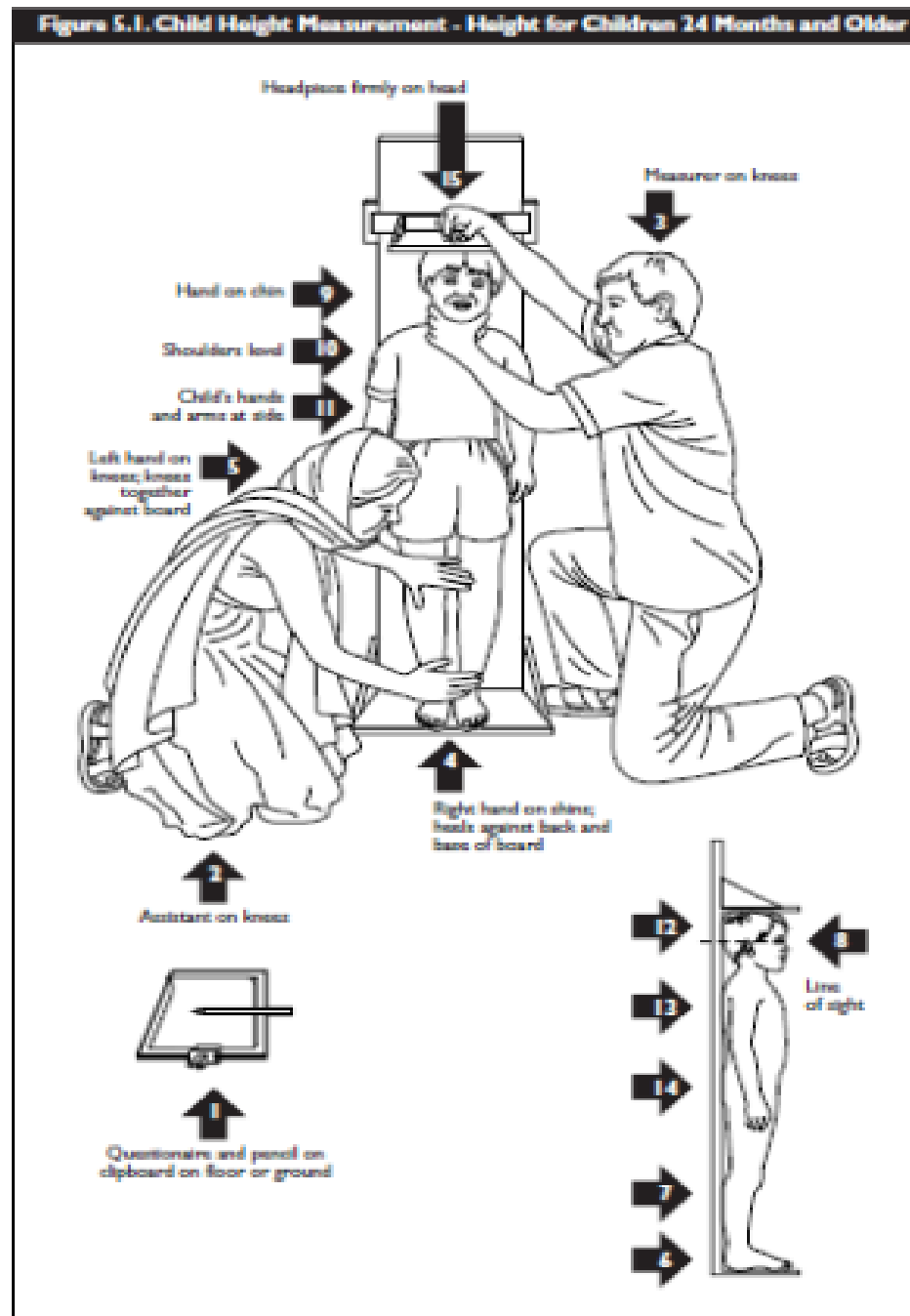
Source: How to Weigh and Measure Children: Assessing the Nutritional Status of Young Children, UN 1998.

Source: Excerpt from Bruce Cogill. Anthropometric Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Series Title 2 Indicator Guides. June 2001

Using the height board:

- i. The measurer or assistant will place the measuring board on a hard flat surface against a wall, table, tree, staircase, etc. making sure the board is not moving.
- ii. The measurer or assistant will ask the mother to remove the child's shoes and unbraid any hair that would interfere with the height measurement. Ask her to walk the child to the board and to kneel in front of the child.
- iii. The assistant will place the OPT Plus Form 1 and pencil on the ground (Arrow 1) and kneel with both knees on the right side of the child (Arrow 2).
- iv. The measurer will kneel on his/her right knee on the child's left side (Arrow 3). This will give him/her maximum mobility.
- v. The assistant will place the child's feet flat and together in the center of and against the back and base of the board/wall. Place his/her right hand just above the child's ankles on the shins (Arrow 4), his/her left hand on the child's knees (Arrow 5) and push against the board/wall. Make sure the child's legs are straight and the heels and calves are against the board/wall (Arrows 6 and 7) and tell the measurer when he/she have completed positioning the feet and legs.
- vi. The measurer will tell the child to look straight ahead at the mother who should stand in front of the child and make sure the child's line of sight is level with the ground (Arrow 8). He/She will place his/her open left hand under the child's chin and gradually close his/her hand (Arrow 9). Do not cover the child's mouth or ears. Make sure the shoulders are level (Arrow 10), the hands are at the child's side (Arrow 11), and the head, shoulder blades and buttocks are against the board/wall (Arrows 12, 13 and 14). With the measurer right hand, lower the headpiece on top of the child's head and make sure he/she will push through the child's hair (Arrow 15).
- vii. The measurer and assistant will check the child's position (Arrows 1-15) and repeat any steps as necessary.
- viii. The measurer will check if the child's position is correct, then read and call out the measurement to the nearest 0.1 cm. He/She will remove the headpiece from the child's head and his/her left hand from the child's chin.
- ix. The assistant immediately records the measurement and show it to the measurer.
- x. The measurer will check the OPT Plus Form 1 for accuracy and legibility and instruct the assistant to erase and correct any errors.

In worst scenarios and the length/height should be measured and no length/height board is available, the team can use a steel ruler placed securely against a flat surface, i.e. wood board or wall. A carpenter's triangle/triangular ruler may be used as head piece.



Source: Excerpt from Bruce Cogill. Anthropometric Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Series Title 2 Indicator Guides. June 2001

e. Computing the Age of Preschoolers in Months

For quick calculation of age in months, use the Age in Months Table (Attachment 6a and 6b). If said table is not available, use the long hand method below:

- e1. See to it that the date of birth of the child is correct. To ensure that the birth date is correct, counterchecked the birth date of the child in the newborn infants record book of the RHM or with the records of local nutrition and health workers, e.g. midwife, BNS or BHW.
- e2. Compute the age of the child to the nearest month as of the child's last birth date using this formula:

$$\text{Age} = (\text{number of years/month/days from date when weight measurement was taken}) - (\text{date of birth})$$

- e3. Convert age in years into months by dividing by 12. Add the age in months to the product and the total gives the age in months. After computation of the age-in-months, disregard the number of days.

To illustrate:

Example 1

Date of birth : November 10, 2009
Date of weighing : November 29, 2009

To compute:

<u>Year</u>	<u>Month</u>	<u>Day</u>	
2009	11	29	- Date of weighing
- 2009	11	10	- Date of birth
0	0	19	

Since the age of child is only 19 days, compute the age in months as zero (0).

Example 2

Date of birth : January 30, 2009
Date of weighing : July 16, 2009

To compute:

<u>Year</u>	<u>Month</u>	<u>Day</u>	
<u>2009</u>	<u>07</u> ⁶	<u>16</u> ⁴⁶	- Date of weighing
- <u>2009</u>	<u>01</u>	<u>30</u>	- Date of birth
0	5	16	

The child's age is 5 months and 16 days. Disregard the number of days.
The child's age in months is 5.

Example 3

Date of birth : October 1, 2006
Date of weighing : August 31, 2009

To compute:

<u>Year</u>	<u>Month</u>	<u>Day</u>	
<u>2009</u> ²⁰⁰⁸	<u>8</u> ²⁰	<u>31</u>	- Date of weighing
- <u>2006</u>	<u>10</u>	<u>01</u>	- Date of birth
2	10	30	

The child's age is 2 years, 10 months and 30 days or converting the years to months, e.g. (2 years x 12 months is 24) + 10 months, the child is 34 months.

f. Determination of Nutritional Status

The growth tables developed by the TWG-Child Growth based on WHO-CGS shall be used by all field nutrition and health workers in determining the nutritional status of children during the OPT Plus. The tables are downloadable from www.nnc.gov.ph.

The **weight-for-age** reflects body weight relative to the child's age. This indicator is used to assess whether a child is underweight or severely underweight for his/her age.

A child who has oedema of both feet, fluid retention has increased weight, masking what may actually be very low weight. This child is automatically considered severely undernourished or severely acute malnutrition (SAM) and should refer to the Philippines Protocol on Integrated Management of Acute Malnutrition (PIMAM).

f1. How to use the weight-for-age table:

f1.1 In the weight-for-age table, look for the point where the child's age in months intersects with the actual weight of the child, use the appropriate table that is for boy or girl.

f1.2 Assess the nutritional status of the child using the suggested cut-off points for normality.

f2. How to interpret results using the weight-for-age table:

Each age under the first column of the weight-for-age table has a corresponding $\pm 2SD$ (plus or minus 2 standard deviation) values in the succeeding columns for both sexes. The $\pm 2SD$ values represent the minimum and maximum “boundaries” for the measurement of the child to be classified as within the acceptable limits of normality. Thus, if the weight of the child is less than the $-2SD$ value, the child is considered underweight for his/her age. However, if the weight of the child falls above the $+2SD$ value, the child is overweight for his/her age.

The nutritional status of preschoolers using the weight-for-age indicator is classified into:

- a. **Normal** has a $\pm 2SD$ (plus or minus 2 standard deviation) value, meaning the child’s weight is within the normal limits.
- b. **Underweight** has a $< -2SD$ (less than minus 2 standard deviation) value, meaning the child’s weight is lower or below the normal weight for his/her age.
- c. **Severely Underweight** has a $< -3SD$ (less than minus 3 standard deviation) value, meaning the child’s weight is very much lower than normal for his/her age.
- d. **Overweight** has a $> +2SD$ (more than plus 2 standard deviation) value, meaning the child’s weight is higher or above the normal weight for his/her age. Note: Obesity is more appropriately determined using weight-for-length/height data.

Look for the column in the weight-for-age table (Attachment 7a and 7b) that corresponds to the weight of the child, i.e. determine if the child’s weight is normal, underweight, severely underweight or overweight; use the appropriate table that is for boy or girl.

Example:

- | | |
|--|------------------------|
| 1) A 5-month old girl weighing 5.5 kg | - Normal |
| 2) A 17-month old girl weighing 7.5 kg | - Underweight |
| 3) A 71-month old boy weighing 11.2 kg | - Severely Underweight |
| 4) A 54-month old boy weighing 25.5 kg | - Overweight |

The **length/height-for-age** reflects attained growth in length or height at the child’s age at a given time. This indicator can help identify children who are stunted (short) due to prolonged undernutrition or repeated illness. Children who are tall for their age can also be identified.

f3. How to use the length/height-for-age table:

- f3.1 In the length/height-for-age table, look for the point where the child's age in months intersects with the actual length/weight of the child, use the appropriate table that is for boy or girl.
- f3.2 Assess the nutritional status of the child using the suggested cut-off points for normality.

f4. How to interpret results using the length/height-for-age table:

Each age under the first column of the length/height-for-age table has a corresponding $\pm 2SD$ (*plus* or minus 2 standard deviation) values in the succeeding columns for both sexes. The $\pm 2SD$ values represent the minimum and maximum "boundaries" for the measurement of the child to be classified as within the acceptable limits of normality. Thus, if the length/height of the child is below the $-2SD$ value, the child is short/stunted for his/her age. If the length/weight of the child falls above the $+2SD$ value, the child is tall for his/her age.

The nutritional status of preschoolers using the length/height-for-age indicator is classified into:

- a. **Normal** has a $\pm 2SD$ (Plus or minus 2 standard deviation) value, meaning the child's height is within the normal limits.
- b. **Short/stunted** has a $< -2SD$ (less than minus 2 standard deviation) value, meaning the child's height is lower or below the normal height for his/her age.
- c. **Severely stunted/short** has a $< -3SD$ (less than minus 3 standard deviation) value, meaning the child's weight is very much lower the normal height for his/her age.
- d. **Tall** has a $> +2SD$ (more than plus 2 standard deviation) value, meaning the child's weight is higher than the normal height for his/her age.

Look for the column in the length/height-for-age table (Attachment 8a and 8b) that corresponds to the length/weight of the child, i.e. determine if the child's length/height is normal, stunted, severely stunted or tall.

Example:

- 1) A 5-month old girl with length of 65.0 cm - Normal
- 2) A 18-month old girl with length of 72.8 cm - Stunted
- 3) A 71-month old boy with height of 100.7 cm - Severely Stunted
- 4) A 54-month old boy with height 120 cm - Tall

The **weight-for-length/height** reflects body weight in proportion to attained growth in length or height. Weight-for-length/height help identify children with low weight-for-height who may be wasted/thin or severely wasted/thin. Wasting/thinness is usually caused by a recent illness or food shortage that causes acute and severe weight loss, although chronic undernutrition or illness can also cause this condition.

f5. How to use the weight-for-length/height table:

f5.1 In the weight-for-length/height table, look for the point where the child's actual length/height intersects with the actual weight of the child, use the appropriate table that is for boy or girl.

f5.2 Assess the nutritional status of the child using the suggested cut-off points for normality.

f6. How to interpret the weight-for-length/height table:

Each length/height under the first column of the weight-for-length/height table has a corresponding $\pm 2SD$ (plus or minus 2 standard deviation) values in the succeeding columns for both sexes. The $\pm 2SD$ values represent the minimum and maximum "boundaries" for the measurement of the child to be classified as within the acceptable limits of normality. Thus, if the weight-for-length/height of the child is less than the $-2SD$ value, the child is wasted/thin for his/her age. However, if the weight-for-length/height of the child falls above the $+2SD$ value, the child is overweight for his/her age.

The nutritional status of preschoolers using the length/height-for-age indicator is classified into:

- a. **Normal** has a $\pm 2SD$ (plus or minus 2 standard deviation) value, meaning the child's body weight in proportion to length/height or thinness is within the normal limits compared to the standard for children his/her weight-for-length/height.
- b. **Wasted/Thin** has a $< -2SD$ (less than minus 2 standard deviation) value, meaning the child's body weight in proportion to length/height or thinness is low relative to the standard weight-for-length/height.
- c. **Severely wasted/thin** has a $< -3SD$ (less than minus 3 standard deviation) value, meaning the child's body weight in proportion to length/height or thinness is very low relative to his/her weight-for-length/height.
- d. **Overweight** has a $> +2SD$ (more than plus 2 standard deviation) value, meaning the child's body weight in proportion to length/height or fatness is high relative to the standard weight for his/her weight-for-length/height.

- e. **Obese** has a $> +3SD$ (more than plus 3 standard deviation) value, meaning the child's body weight in proportion to length/height or fatness is very high relative to the normal weight-for-length/height for his/her weight-for-length/height. Note: Obesity is more appropriately determined using weight-for-length/height data.

Look for the column where the weight intersects with the length/height (Attachment 9a and 9b) of the child to determine if the child is normal, wasted/thin, severely wasted/thin, overweight or obese.

Example:

- 1) A 5-month old girl: length 65.0 cm weight 6.2 kg - Normal
- 2) A 18-month old girl: length 72.8 cm weight 7.3 kg - Thin/Wasted
- 3) A 36-month old girl: height 92.5 cm weight 18.5 kg- Obese
- 4) A 60-month old boy: height 100.9 cm weight 20.0 kg- Overweight
- 5) A 60-month old boy: height 110.4 cm weight 13.8 kg- Sev Wasted

g. Interpretation of OPT Plus Results

As suggested in this guidelines, the BNC as the primary user of the barangay OPT Plus data should be encouraged to discuss the OPT Plus results, within or immediately after the first quarter. The BNS or BHW may present the overall prevalence of underweight, wasting and stunting in the barangay, by sex, by age group, by purok/sitio using the following table and with the aid of the spot map.

Prevalence of Underweight, January-March 20__ OPT Plus, By Sex, By Purok

Areas	Girls		Boys	
	No. of Underweight Children 0-71mos	Prevalence of Underweight	No. of Underweight Children 0-71mos	Prevalence of Underweight
Barangay X				
Purok 1				
Purok 2				
Purok 3				
Purok 4				

Prevalence of Wasting, January-March 20__ OPT Plus, By Sex, By Purok

Areas	Girls		Boys	
	No. of Wasted Children 0-71mos	Prevalence of Wasting	No. of Wasted Children 0-71mos	Prevalence of Wasting
Barangay X				
Purok 1				
Purok 2				
Purok 3				
Purok 4				

Prevalence of Stunting, January-March 20__ OPT, By Sex, By Purok

Areas	Girls		Boys	
	No. of Stunted Children 0-71mos	Prevalence of Stunting	No. of Stunted Children 0-71mos	Prevalence of Stunting
Barangay X				
Purok 1				
Purok 2				
Purok 3				
Purok 4				

The table above can indicate which of the puroks in a barangay have higher prevalence of underweight/wasted/stunted children. The same may be prepared by the C/MNAO for its barangays, and the PNAO for its component municipalities and/or cities.

Below is another way of analyzing results, to identify who among the different age groups and from which area are the most affected by undernutrition. The same may be used by cities/municipalities and provinces. Instead of puroks, they may compare the different municipalities according to the prevalence of underweight/wasting/stunting among the different age groups.

Prevalence of Underweight/Stunting/Wasting, January-March 20__ OPT, By Age Group, By Purok

Area	Prevalence, by age group						
	0-5 mos	6-11 mos	12-23 mos	24-35 mos	36-47 mos	48-59 mos	60-71 mos
Barangay X							
Purok 1							
Purok 2							
Purok 3							
Purok 4							

Note: This is similar to OPT Plus Form 1b

For cities/municipalities, the current year prevalence may be compared with that of the previous years to determine whether the nutrition situation in the barangay has improved or deteriorated. The process will help in identifying areas which are more at-risk to malnutrition.

Prevalence of Underweight/Wasting/Stunting, CYs 2010-2012, by Barangay

Area	2010		2011		2012	
	No. of 0-71 mos. children affected	Prevalence	No. of 0-71 mos. children affected	Prevalence	No. of 0-71 mos. children affected	Prevalence
Barangay 1						
Barangay 2						
Barangay 3						
Barangay 4						
Barangay 5						

Aside from determining the prevalence of the nutritional problems, and comparing the change across years, Provincial/City/Municipal/Barangay Nutrition Committees (P/C/M/BNC) may also compare the prevalence of undernutrition of the area with that of other cities/municipalities/barangays and by comparing their prevalence to the World Health Organization's cut-offs for problems of public health significance.

Prevalence cut-off values of underweight and underheight for public health significance (WHO, 1995)

Level	In percent	
	Underweight	Underheight
Low	< 10	< 20
Medium	10 – 19	20-29
High	20 – 29	30-39
Very High	>=30	>=40

Prevalence cut-off values of thinness for public health significance (WHO, 1995)

Level	Thinness (in percent)
Acceptable	< 5
Poor	5 – 9
Serious	10 – 14
Critical	>=15

For the assessment of the situation, BNCs should be encouraged to update the existing spot map posted in the nutrition office and/or barangay hall. Doing so will help the BNCs appreciate more visually where most of the malnourished children are located and possibly the external factors contributing to higher undernutrition in one area, e.g. poor access to services due to distance, peace and order problem, natural hazards, and poor sanitation among others.

Wasting vs Stunting vs. Underweight

Wasting is used often as an indicator of the current or recent situation. Wasting results from an acute shortage of food or from acute infections which affect food intake or utilization. Wasting is associated with higher mortality rate and poses more severe health risks than chronic malnutrition, primarily through impairment of bodily functions, among them, resistance to disease. Increased levels of acute malnutrition in a population result in increased illness and death. Wasting is reversible with re-feeding and should be therefore be prioritized.

In severe acute malnutrition (SAM), normal physiological mechanisms continue to adapt. The body reserves its energy and nutrient reserves, decrease energy and nutrient demands which initially are beneficial. However, as severity increases, these adaptations prevent the body's ability to

respond to stresses, e.g. infections. Management of these cases should be reserved to medical practitioners who are knowledgeable on the Protocol for IMAM developed by the World Health Organization.

Increased prevalence of wasting in communities or individuals are associated with displacements of people due to natural calamities and armed conflict, and/or infections.

Stunted/short (*bansot*) children are those considered too short for their age which is an indicator of the long-term cumulative effects of nutrition deficiency. Children <5 years are particularly affected. Short term implications of stunting include growth faltering and weight loss with associated micronutrient deficiencies. Documented longer term effects include impaired physical and mental development of the child. At the community level, consequences of stunting include increased demands on medical, public health services and food assistance especially in crisis and emergency situations. High prevalence of stunting in communities is an indicator of poverty, food insecurity and possibly continuous exposure to infections.

Interventions for stunting should commence on or around 6-12 months to help avert developmental consequences on children. About 36% reduction can be achieved when nutrition interventions at 99% coverage is introduced before 36 months (Maternal and Child Undernutrition, Lancet Series). Introducing nutrition interventions beyond 3 years old have reduced efficiency and may even contribute to development of obesity and diet-related degenerative diseases in later life.

Recommended interventions to avert and manage stunting and undernutrition are found in Attachment 12.

h. Recording, Reporting and Disseminating OPT Plus Results

The activity does not stop with the measurement of children. After the conduct of OPT Plus, the OPT Plus Team will process the results and record them in the OPT Plus forms.

h1. The OPT Plus Forms (Attachment 13)

To facilitate the recording and reporting process, the OPT Plus results will be recorded at different geo-administrative levels using different OPT Plus forms. A summary of the OPT Plus forms by level, is shown in Table 2.

OPT Plus Form 1B should also be filled up to come up with the masterlist of preschoolers whose weights are underweight and severely underweight, and or stunted, wasted.

The list will be presented to the Barangay Nutrition Committee (BNC) for inclusion as beneficiaries of programs and projects implemented in the barangay, among others: micronutrient supplementation (vitamin A, iron & iodine), nutrition education, food production (backyard gardening),

small animal dispersal/raising (poultry, swine, goat), supplementary feeding, and income-generating projects (handicraft, food vending), among others.

All workers in the barangay, i.e. RHM, agriculture technician, teacher-in-charge of nutrition, day care worker, barangay officials should receive a copy of the masterlist of underweight children from the BNS as soon as the OPT Plus results has been consolidated. This should guide the workers when choosing beneficiaries for programs and projects.

h2. Submission and dissemination of OPT Plus Results

Figure 3 shows the flow of report submission and dissemination of OPT Plus results.

h2.1. Upon completion of OPT Plus and recording in OPT Plus forms by the BNS, the RHM will check the entries in the OPT Plus Forms for correctness and accuracy.

h2.2. The BNS as the coordinator of the OPT Plus Team presents the results of the OPT Plus to the Barangay Nutrition Committee (BNC) for guidance and to input in the nutrition assessment.

h2.3. Signed by the Barangay Captain as chair of the BNC, the BNC submits the validated OPT Plus result to the Chairperson of the City/Municipal Nutrition Committee (C/MNC) thru the Office of the Nutrition Action Officer (C/MNAO) for consolidation.

h2.4. The C/MNAO presents the consolidated OPT Plus results to the C/MNC for information and targeting.

The MNC through the mayor will submit the consolidated and signed municipal OPT Plus results to the Provincial Nutrition Action Officer (PNAO). The CNC through the mayor will submit the consolidated OPT Plus results directly to the NNC Regional Office for consolidation.

h2.5. The PNAO presents the OPT Plus results to the PNC for information and targeting. The consolidated OPT Plus results is submitted by the governor to the NNC Regional Office for consolidation.

h2.6. The consolidated City and Provincial OPT Plus result is presented by the NNC- Nutrition Program Coordinator to the Regional Nutrition Committee (RNC) for information, targeting and monitoring.

h2.7. The regional OPT Plus results are then submitted to NNC-CO for consolidation.

h2.8. NNC- central office consolidates the data for presentation to the NNC Technical Committee, preparation of NDMs and dissemination to nutrition program partners.

Figure 3. Validation and Flow of OPT Plus Report Forms

Level	OPT Plus forms	Prepared by	Checked/Validated by	Approved/ Noted by:	Submission to:
Barangay	1 1A 1B	BNS/BHW BNS/BHW BNS/BHW	Midwife/Nurse/D/CNPC Midwife/Nurse/D/CNPC Midwife/Nurse/D/CNPC	BNC Chair BNC Chair	C/MNC Chair C/MNC Chair
Component City/Municipal	2 2A	DCNPC/ND/ C/MNAO DCNPC/ND/ C/MNAO	C/MHO C/MHO	C/MNC Chair C/MNC Chair	Component City/Mun: PNC Chair
Highly Urbanized or Independent Component City (HUC or ICC)	2 2A	DCNPC/ND/ C/MNAO DCNPC/ND/ C/MNAO	C/MHO C/MHO	C/MNC Chair C/MNC Chair	HUC/ICC: RNC Chair
Province	3 3A	DCNPC/ND DCNPC/ND	PHO PHO	PNC Chair PNC Chair	RNC Chair
Region	4 4A 4B	NO III NO III NO III	NPC NPC NPC	RNC Chair RNC Chair RNC Chair	NNC-CO
National	5 5A	NSD Staff NSD Staff	NSD Division Chief NSD Division Chief	NNC ED NNC ED	Partners Partners

Table 2. Guide in Accomplishing and Submitting OPT Plus Forms

Level	OPT Plus Form	Title/Description	Accomplished by	Number of copies	Submitted to	When to submit
Barangay	1 (1 page)	List of Preschoolers with weight and height measurement and identified Nutritional Status. The form includes information on the preschooler measured, specifically: household number, name of household head/mother/caregiver; name of preschooler, sex, date of birth, date of measurement (weight and length/height), age in months, weight, length/height and nutritional status. Other pertinent information in the form are names of the barangay, city/municipality, province, year, and date of OPT Plus.	BNS/BHW	1 - file copy	(Retained in the barangay)	1-2 weeks after last day of OPT Plus conducted or at the latest 25 March of every year
		Checked by midwife/nurse/D/CNPC with date.				
	1A (3 pages)	Barangay Tally and Summary Sheet of Preschoolers with Weight & Height Measurement by Age Group, Sex and Nutritional Status. This form will serve as the tally sheet to determine the actual number of preschoolers measured aggregated by age, sex, and nutritional status. Other pertinent information in the form are names of the barangay, city/municipality, province, estimated number & actual number of preschoolers aged 0-59 months and 0-71 months old measured, percent OPT Plus coverage of 0-59 and 0-71 months old PS, number indigenous PS measured aged 0-59 and 0-71 months old, indigenous group/s, year/period of measurement and previous year prevalence rate.	BNS/BHW	1 - file copy 1 - for RHU 1 - for BNC 1 – for C/MNC	a. C/MNC Chairperson	1 week after completion of consolidation of OPT Plus results or every 15 April of every year
		Checked by RHM/nurse/DCNPC & approved by BNC Chairperson with specific date				

Level	OPT Plus Form	Title/Description	Accomplished By	Number of copies	Submitted to	When to submit
Barangay	1B (1 page)	<p>List of Affected/At-risk Preschoolers 0-71 months old. This form is the summary of the identified preschoolers with underweight, severely underweight, stunted, severely stunted, wasted, severely wasted, overweight and obese. Other pertinent information in the form are name of barangay, city/municipality, province, measurement period & year, name of household head/mother/caregiver, name of preschoolers, sex, indigenous group, age in months and nutritional status.</p> <p>Checked by RHM/nurse/D/CNPC Approved by BNC Chairperson</p>	BNS	<p>1- file copy</p> <p>1- for RHM</p> <p>1- for BNC</p>	<p>a. Rural Health Midwife (for validation)</p> <p>b. Barangay Nutrition Committee (for approval)</p>	One (1) week after completion of OPT Plus consolidated report within the period Jan-March every year
City/ Municipality	2 (4 pages)	<p>City/Municipal Consolidation Sheet of Operation Timbang Plus Results. This form summarizes the OPT Plus results of all barangays aggregated by age group, sex and nutritional status. Pertinent information included are city/municipality, province, total number of barangays, barangays with OPT Plus results, year/period of measurement, indigenous group and number of indigenous PS measured 0-59 and 0-71 months old . Each page of the form corresponds to the nutritional status of the three (3) indices, take note of the specific buttons to check which will inform reader of the specific information</p> <p>Approved by City/Mun Health Officer Noted by Mayor, C/MNC Chaiperson</p>	Nutritionist/ C/MNAO/ D/CNPC	<p>1- file copy</p> <p>1- for C/MNC</p> <p>1-for PNC</p>	C/MNC	One (1) week after consolidation of results of city/municipal OPT Plus or 5 May of every year

Level	OPT Plus Form	Title/Description	Accomplished By	Number of copies	Submitted to	When to submit
	2A (3 pages)	<p>City/Municipal Summary Report on Operation Timbang Plus. This form is the consolidation, of all preschoolers measured in the city/municipality aggregated by age, sex and nutritional status. Other pertinent information include: name of city/municipality, province, region, total number of barangays, total number of barangays with OPT Plus results, year/period of measurement, estimated number of preschoolers 0-59 and 0-71 months old, actual number of preschoolers 0-59 and 0-71 months old measured, percent OPT Plus coverage 0-59 and 0-71 months old, indigenous group/s, number of indigenous PS measured 0-59 and 0-71 months old and the previous year prevalence rate.</p> <p>Checked by City/Municipal Health Officer Approved by Mayor, C/MNC Chairperson</p>	C/MNAO/ nutritionist/ D/CNPC	<p>1- file copy</p> <p>1-for PNC</p> <p>1- for NNC-RO (for city data)</p>	<p>a. Provincial Nutrition Committee (PNC) Chairperson</p> <p>b. NNC-RO (for city data)</p>	One (1) week after city/ municipal consolidation of OPT Plus results or 15 May of every year
Province	3 (4 pages)	<p>Provincial Consolidation Sheet of Operation Timbang Plus Results. This form summarizes the OPT Plus results of all municipalities aggregated by age group, sex and nutritional status. Pertinent information include: province, total number of municipalities, total number of municipalities with OPT Plus results, year/period of measurement, indigenous group and number of indigenous preschool measured 0-59 and 0-71 months old. Each page of the form corresponds to the nutritional status of the three (3) indices, take note of the specific buttons to check which will inform reader of the specific information</p> <p>Approved by Provincial Health Officer Noted by Governor, PNC Chairperson</p>	D/CNPC/ nutritionist	<p>1- file copy</p> <p>1- for NPC</p>	NNC-RO	One (1) week after consolidation of provincial OPT Plus results consolidation or 5 June of every year

Level	OPT Plus Form	Title/Description	Accomplished By	Number of copies	Submitted to	When to submit
	3A (3 pages)	<p>Provincial Summary Report on Operation Timbang Plus. This form is the consolidation of all preschoolers measured in the province, aggregated by age, sex and nutritional status. Other pertinent information include: province, total number of municipalities, total number of municipalities with OPT Plus results, percent OPT Plus coverage (Mun level); total number of barangays, total number of barangays with OPT Plus results, percent OPT Plus coverage (Bgy level); year/period of measurement, estimated number of preschoolers 0-59 and 0-71 months old, actual number of preschoolers aged 0-59 and 0-71 months measured, indigenous group and number of indigenous preschool 0-59 and 0-71 months old, and the previous year prevalence rate.</p> <p>Validated by Provincial Health Officer Approved by Governor, PNC Chairperson</p>	D/CNPC/ Nutritionist	1- file copy 1- for NPC	Nutrition Program Coordinator (NPC)	One (1) week after consolidation of city/ municipal OPT Plus results or 15 June of every year
	4 (4 pages)	<p>Regional Consolidation Sheet of Operation Timbang Plus Results. This form includes OPT Plus results within the region, specifically the listing of all provinces and cities. Other information include: region, total number of provinces/cities, total number of provinces and cities with OPT Plus Results, year/period of measurement, indigenous group and number of indigenous preschool measured 0-59 and 0-71 months old</p> <p>Approved by Nutrition Program Coordinator Noted by Regional Director, RNC Chairperson</p>	NO III/NNC	1- file copy 1 –for RNC 1- for NNC-CO	NNC-CO	One (1) week after completion of consolidation of provincial OPT Plus results or 5 July of every year

Level	OPT Plus Form	Title/Description	Accomplished By	Number of copies	Submitted to	When to submit
	4A (3 pages)	<p>Regional Summary Report on Operation Timbang Plus. This form is the consolidation of all preschoolers measured in the region, aggregated by age, sex and nutritional status. Other pertinent information include: region, total number of province/city, total number of municipalities/barangays, total number of provinces/cities with OPT Plus results, total number of municipalities/barangays with OPT Plus results, percent OPT Plus coverage Province/City/Mun/Barangay, percent OPT Plus coverage 0-59 and 0-71 months old, year/period of measurement, estimated number of preschoolers 0-59 and 0-71 months old, actual number of preschoolers aged 0-59 and 0-71 months measured, indigenous group and number of indigenous preschool 0-59 and 0-71 months old, and the previous year prevalence rate.</p> <p>Validated by NPC Approved by RNC Chairperson</p>	NO III	<p>1- file copy</p> <p>1- for RNC</p> <p>1 – for NNC-CO</p>	NNC-CO	One (1) week after completion of consolidation of provincial OPT Plus results or 5 July of every year
Region	4B (1 page)	<p>Report on Regional Coverage of Operation Timbang Plus. This form is the matrix coverage of OPT Plus results in the region, by province/city, municipalities, barangay, estimated and actual number of preschooler measured and actual number of indigenous preschoolers measured. Other pertinent information include: region and period of OPT</p> <p>Validated by NPC</p>	NO III	<p>1- file copy</p> <p>1 –for RNC</p> <p>1- for NNC-CO</p>	<p>NNC-CO</p> <p>Note: Presented to RNC</p>	One (1) week after completion of consolidation of regional OPT Plus results or 15 July of every year

Level	OPT Plus Forms	Title/Description	Accomplished By	Number of copies	Submitted to	When to submit
National	5 (4 pages)	<p>National Consolidation Sheet of Operation Timbang Plus Results. This form summarizes all OPT Plus results in the country by city/municipality aggregated by age group, sex and nutritional status. Pertinent information includes region, province, total number of province/city, total number province/citywith OPT results, year/period of measurement, indigenous group and number of indigenous PS measured 0-59 and 0-71 months old.</p> <p>Approved by NSD Division Chief Noted by NNC Executive Director</p>	NO II	1- file copy	n/a <i>Note: Presented to NNC TechCom</i>	Should be completed by end of September every year
	5A (3 pages)	<p>National Summary Report on Operation Timbang Plus Results. This form consolidates the OPT Plus results gathered from all barangays of the country aggregated by age group, sex and nutritional status. Pertinent information include region; total number of province, city, municipalities, barangays; total number of province, city, municipalities, barangays with OPT Plus results; percent OPT Plus coverage of province, city, municipalities, barangays; estimated number of 0-59 months and 0-71 months old, actual number of 0-59 months and 0-71 months old measured; number of indigenous PS measured 0-59 and 0-71 months old, percent OPT Plus coverage of 0-59 and 0-71 months old preschool children; year/period of measurement and previous year prevalence rate.</p> <p>Validated by NSD Division Chief Approved by NNC TechComm Chairperson</p>	NO II	1- file copy		Should be completed by end of September every year

i. Post OPT Plus Activities of the BNS/BHW

Action Officers and D/CNPCs should encourage BNSs/BHWs to do the following post-OPT activities.

- 2) Ensure that the family/child/children are referred to proper institutions to help them improve their way of life and nutritional status
- 3) Ensure active participation of the families/child/children in the programs and projects they should be involved in (nutrition education classes, supplementary feeding, immunization, de-worming and others)
- 4) Ensure that the growth of children, especially the 0-23 months old and underweight 24-71 months old children are monitored every month at the health center, or through supervised home visit.
- 5) Maintain active networking among civic groups, Non-government organizations for referrals and funding source
- 6) Monitor the planning and implementation of the programs and projects for the identified families of the malnourished children
- 7) Ensure that the Barangay Nutrition Committee meets regularly to discuss updates on the programs and projects being implemented for the families of the malnourished children during BNC meetings

ii. References

A. Books and Publications

Cogill, Bruce. *Anthropometric Indicators Measurement Guide*. June 2001.

National Nutrition Council. *Revised Operation Timbang Guidelines*. 1994.

_____. *Glossary of Terms for the Philippine Plan of Action for Nutrition*.

Developed by the Technical Working Group on Nutrition Research and Surveillance. September 1996.

_____. *The Philippine Nutrition Program: Implementing Guidelines*. June 1981.

_____. *Operation Timbang Workbook*. (1975)

Food and Nutrition Research Institute. DOST. *A Handbook on International Reference Standards (IRS) Growth Tables and Charts Adopted for Use in the Philippines*. 2003.

_____. *User's Manual The International Reference Standards (IRS) Growth Tables and Charts adopted for Field Use in the Philippines*. 2003.

Food and Nutrition Research Institute and Philippine Pediatric Society. *Anthropometric Tables and Charts for Filipino Children*. 1992.

Department of Health. *Procedural Guidelines for Growth Monitoring of Preschool Children*. 1986.

World Health Organization. *Training Course on Child Growth Assessment. Module C. Interpreting Growth Indicators*. Geneva, WHO, 2008.

B. Circulars/Orders

Department of Health Administrative Order No. 0015 Series 2010. "Policy on Child Growth Standards". 8 June 2010.

_____. Executive Order No. ____, Series 2003 "estimating target population..."

National Nutrition Council Governing Board Resolution No. 2 Series 2008. "Adaptation of the New WHO Child Growth Standards for Use for 0-5 years old the Philippines"

C. Website

www.who.int/childgrowth/en/

www.doh.gov.ph

www.Nnc.gov.ph

ATTACHMENTS



Republika ng Pilipinas
KAGAWARAN NG KALUSUGAN
PAMBANSANG PANGASIWAAN SA NUTRISYON
(NATIONAL NUTRITION COUNCIL)
Nutrition Building, 2332 Chino Roces Avenue Extension
Taguig City, Philippines



Attachment 1

NNC GOVERNING BOARD
Resolution No. 2, S. 2008

**ADOPTION OF THE NEW WHO CHILD GROWTH
STANDARDS FOR USE FOR CHILDREN 0-5 YEARS OLD IN
THE PHILIPPINES**

WHEREAS, the World Health Organization (WHO), in cooperation with the United Nations Children's Fund (UNICEF), launched the new WHO Child Growth Standards (WHO-CGS) for Children 0-5 Years Old during a seminar workshop held in Tagaytay City last June 2006, with participation from 10 countries namely: Cambodia, China, Fiji, Lao PDR, Malaysia, Mongolia, Papua New Guinea, Viet Nam, Japan, and the Philippines;

WHEREAS, the WHO CGS is based on the results of a Multicentre Growth Reference Study (MGRS), a longitudinal study conducted between 1997 and 2003 with sample children from a diverse set of countries i.e. Brazil, Ghana, India, Norway, Oman, and the USA in order to consider ethnic, genetic, and cultural variations in how children were nurtured;

WHEREAS, the WHO CGS sets the benchmark for growth and development of all children from birth to age 5 and defines how children should grow with a premise that any deviations from the pattern it describes are evidence of abnormal growth;

WHEREAS, complementary to the global strategy on infant and young child feeding, the WHO-CGS provides a "single international standard that represents the best description of physiological growth for all children from birth to five years of age and to establish the breastfed infant as the normative model for growth and development";

WHEREAS, adoption of the WHO CGS will give deeper meaning to the achievement of the Millennium Development Goals, specifically the target on the prevalence of underweight children among 0-5 years old, since the growth of Filipino children will be benchmarked on the best possibility for their growth;

WHEREAS, the NNC Technical Committee approved during its meeting on 29 November 2007 the plan of work and timetable of activities for the adoption of the new standards with the inclusion of promotional activities on the use of the new standards; a copy of which is attached;

"Sa wastong nutrisyon ni mommy, siguradong healthy si baby!"

P.O. Box 2490 Makati Central Post Office Tel. Nos. (63-2) 843-5824 • 843-5832 • 843-5834 Fax No. (63-2) 843-5818

*NNC GOVERNING BOARD
Resolution No. 2, S-2008*


**ADOPTION OF THE NEW WHO CHILD GROWTH STANDARDS FOR USE FOR
CHILDREN 0-5 YEARS OLD IN THE PHILIPPINES**

NOW, THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED, in consideration of the beneficial features of the WHO-CGS in assessing the growth of Filipino children, to adopt the WHO-CGS for use in the Philippines and to ensure full implementation by 2009.

RESOLVED FURTHER, for the Department of Health, Department of Social Welfare and Development, and the Department of the Interior and Local Government to issue the appropriate agency policy instrument to ensure the use of the WHO-CGS in health, nutrition, social welfare, and other public and private institutions.

RESOLVED FURTHER, for the National Nutrition Council Secretariat to ensure that the plan of work for the adoption of the WHO-CGS is carried out as scheduled, and that appropriate information is communicated to all parties concerned, especially to users at the local level.

Approved this 27th day of June 2008, at the Lung Center of the Philippines.


FRANCISCO T. DUQUE III, M.D., M.Sc.
Secretary of Health and
Chair, National Nutrition Council Governing Board
Lead, Anti-Hunger Task Force

Attested by:



Assistant Secretary Maria-Bernardita T. Flores, CESO III
Executive Director and Council Secretary


NNC GOVERNING BOARD

Resolution No. 2, S. 2008


ADOPTION OF THE NEW WHO CHILD GROWTH STANDARDS FOR USE FOR
CHILDREN 0-5 YEARS OLD IN THE PHILIPPINES

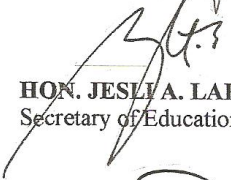
CONFORME


HON. ARTHUR C. YAP
Secretary of Agriculture
And Vice-Chair, NNC Governing Board


HON. RONALDO V. PUNO
Secretary of the Interior and
Local Government and Vice-Chair,
NNC Governing Board



HON. ROLANDO G. ANDAYA, JR.
Secretary of Budget and Management


HON. ESTRELLA F. ALABASTRO
Secretary of Science and Technology

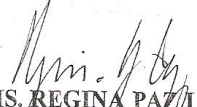

HON. JESLI A. LAPUS
Secretary of Education



HON. ESPERANZA I. CABRAL
Secretary of Social Welfare and
Development



HON. MARIANO D. ROQUE
Secretary of Labor and Employment


HON. PETER B. FAVILA
Secretary of Trade and Industry


HON. RALPH G. RECTO
Secretary of Socio-Economic Planning


MS. REGINA PAZ L. LOPEZ
Managing Director
ABS-CBN Foundation, Inc.


MS. ANNA TERESA M. ABROGAR
President
GMA Films and GMA Worldwide


MS. CARMEN JIMENEZ-ONG
Board of Directors
GMA Kapuso Foundation, Inc.



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

JUN 08 2010

ADMINISTRATIVE ORDER
No. 2010- 0015

SUBJECT: Revised Policy on Child Growth Standard

I. BACKGROUND/ RATIONALE

A child is a growing individual. Growth of children is an indicator of his/her health and nutrition status. It is sensitive to external factors such as nutrition and disease. Assessing the child's growth and nutritional status through growth monitoring and promotion (GMP) plays a vital role in identifying appropriate health and nutrition interventions. Hence, GMP is of great importance in child health and nutrition care.

In 2003, the Philippines adopted the National Center for Health Statistics (NCHS) International Reference Standards (IRS) for assessing the nutritional status of Filipino children. However, the NCHS-IRS does not adequately represent early childhood growth at individual or population level assessment. In 2006, the World Health Organization (WHO), in cooperation with the United Nations Children's Fund (UNICEF), launched the Child Growth Standard (CGS) for children 0-5 years old.

The Department of Health (DOH), based on Resolution No. 2s. "Adopting the New WHO Child Growth Standards" issued by the National Nutrition Council Governing Board, agreed to adopt the WHO-CGS as the standards to use in assessing the nutritional status of 0-5 years old children and in the conduct of growth monitoring and promotion activities in the country. The reasons cited for the adoption of the WHO-CGS are as follows:

- 1.) Will give deeper meaning to the achievement of the Millennium Development Goals (MDGs), specifically the target on the prevalence reduction of underweights among children 0-5 years old since the growth of Filipino Children will be benchmarked on the best possibility for their growth.
- 2.) Will allow comparison of the growth of Filipino Children against the single international standard that represents the best description of physiological growth for all children from birth to five years of age as opposed to describing growth against a reference.

Building # 1, San Lazaro Compound, Rizal Avenue, Sta. Cruz, 1003 Manila • Trunkline: 7438301 • Directline: 7119501
Telefax: (632) 7431829; 7431786 • URL: <http://www.doh.gov.ph> ; E-mail: osec@doh.gov.ph

pu

- 3.) Will show that even a child in any part of the world regardless of ethnicity, has the potential to grow and develop as long as the child's basic needs are met.
- 4.) Will establish the breastfed infant as the normative model for growth and development, consistent with national and international guidelines that recognize breastfeeding as the best source of nutrition for infants.
- 5.) Will detect malnutrition long before signs and symptoms of it become apparent and therefore, allows focus on preventive and promotive interventions rather than rehabilitative/curative measures and reaching more at-risk children.
- 6.) Will include core development milestones that healthy children are expected to achieve during specified age ranges.

This Order is issued to adopt the WHO-CGS for the assessment of nutritional status of children 0-5 years old and in the conduct of growth monitoring and promotion (GMP) and Operation Timbang (OPT) activities, thereby repealing AO 25 s. 2003.

II. OBJECTIVE:

To promote optimum child growth and development through the enhanced implementation of GMP activities using the WHO-CGS.

III. COVERAGE AND SCOPE

This order shall apply to all national, regional and local government units, public and private medical practitioners and health facilities and other agencies and stakeholders who are involved in assessing the nutritional status of children and in conducting GMP and OPT activities.

IV. GENERAL GUIDELINES

1. The growth and development of children 0-5 years (0-71 months) old shall be assessed by measuring their weights and heights regularly.
 - a. For children 0-less than 2 years (0-23 months) old, their weights and lengths shall be measured once a month
 - b. For children 2-5 years (24-71 months) old their weights and heights shall be measured twice a year
 - c. The weight and height of a child shall also be measured every time they come in contact with the health care system e.g., when the child is sick and brought in for consultation.
 - d. The weights of children 0-71 months taken during Operation Timbang (OPT) shall be done once a year (January-March) which would cover at least 16.2% of the total population. Underweight and overweight children identified during OPT shall be referred to the health facility for regular growth monitoring and for institution of appropriate interventions.
2. WHO-CGS shall be used as the standard in the assessment of child's nutritional status. Standard measurement indicators to measure child's growth are: weight for age for 0-71 months old; length for age for 0-23 months old or

height for age for 24-71 months old; and weight for length for 0-23 months old or weight for height for 24-71 months old.

2.1 Weight-for-age indicator - reflects body weight relative to the child's age on a given day. This indicator provides a rough estimate of child's present nutritional status.

2.2 Length/height-for-age indicator - reflects attained growth in length or height at the child's age at a given visit. Length/height combined with age will give a good indication of stunting which reflects past and chronic malnutrition. Length and height are measured to children under two (2) years and children above 2 years, respectively.

2.3 Weight-for-length/height indicator - reflects body weight in proportion to attained growth in length/height. This indicator can distinguish current malnutrition (acute) from past malnutrition (chronic).

3. All newborns and children ages below 71 months old shall be given an ECCD card as the tool for growth monitoring and promotion. The ECCD card for boys and girls shall serve as the record of the essential services which a child shall receive from 0-71 months old. This card also contains a chart where the weights and heights of children shall be plotted to observe trends in growth and to detect growth faltering so that immediate measures/interventions shall be instituted. All newborns whose mothers have been issued a Mother and Child Book (MCB) shall use the ECCD card attached in the MCB.
4. Filling-up of ECCD Card and MCB shall be administered by a health professional e.g. doctors, nurses, midwives, nutritionist. Trained barangay health workers (BHWs) and barangay nutrition scholars (BNS) may also administer but under the supervision of the health professional.
5. The WHO-CGS Growth tables and charts, ECCD cards and equipments e.g. weighing scales/infantometer/microtoise/height/length board, etc. shall be used and made available in all Rural Health Units, public and private health and hospital facilities or in places where weight and height measurements will be taken. The reproduction of ECCD cards will be the responsibility of the LGU with augmentation from national agencies and other stakeholders, partners and donors
6. Assessing child's nutritional status/monitoring child's growth and development shall be integrated into the existing MNCHN service delivery channels and through other approaches that could reach children 0-71 months old children or in any contact point of visit of the child e.g Garantisadong Pambata, Operation Timbang, IMCI, EPI, etc.
7. Promotion to encourage mothers to bring their children for growth monitoring and availment of health and nutrition services shall be intensified.
8. Children needing immediate assistance shall be referred to the appropriate institution/health system.

V. ROLES AND RESPONSIBILITIES

A. Department of Health

1. National Center for Disease Prevention and Control

The DOH-NCDPC is primarily responsible in the overall execution and adoption of the revised policy and guidelines on Child Growth Standard and GMP. It will undertake the following tasks:

- Lead in the dissemination of the AO and advocate for its adoption and implementation among concerned stakeholders
- Provide technical inputs in the operationalization of the WHO-CGS and GMP
- Mobilize funds for the trainings of trainers and roll out trainings of WHO-CGS and GMP at the CHD/provincial levels and advocate for additional resources
- Monitor and evaluate the field implementation of the WHO-CGS and GMP
- Establish coordination and networking with FNRI, NNC and other stakeholders in planning, implementation, monitoring and evaluation of WHO-CGS adoption.

2. National Center for Health Promotion

- Develop prototype materials on WHO-CGS and GMP in coordination with DOH-NCDPC
- Provide technical assistance to CHDs to help LGUs adopt and implement the WHO-CGS and GMP
- Promote the adoption of WHO-CGS and GMP among concerned agencies and practitioners

3. National Nutrition Council

- Coordinate and facilitate the adoption of WHO-CGS at local level
- Mobilize resources for the localization of the WHO-CGS
- Evaluate progress of the CGS

4. Center for Health Development (CHD)

- Disseminate the revised AO on WHO-CGS and advocate for its adoption and implementation by LGU health systems within their respective regions
- Provide technical assistance to LGUs, NGOs, academes and other stakeholders relative to WHO-CGS adoption and GMP implementation
- Generate additional resources to implement the WHO-CGS and GMP
- Conduct of orientation and training on WHO-CGS and GMP
- Monitor the implementation of WHO-CGS and GMP in the region

5. Hospitals

- Ensure all growth tables and charts in the hospital are WHO-CGS based
- Provide budgetary allocation for the procurement of ECCD cards and equipments for taking of weight and height measurements
- Conduct orientation and/or training of hospital staff in using the WHO-CGS and GMP
- Monitor the implementation of WHO-CGS adoption and GMP implementation in the hospital

6. Local Government Units (LGUs)

- Ensure funding for the implementation of the WHIO-CGS and GMP
- Ensure availability of weighing scales, microtoise, infantometers, height boards, ECCD cards, WHO-CGS tables and charts and other necessary supplies to be used for the assessment and recording of nutritional status
- Ensure all growth charts and tables used in the LGU health facilities/day care centers are WHO-CGS based
- Conduct orientation and training of field health workers including barangay health workers and barangay nutrition scholars in using WHO-CGS and GMP
- Monitor and evaluate the WHO-CGS and GMP implementation in their localities
- Establish coordination and networking among concerned agencies in WHO-CGS and GMP implementation

7. Private Sector/Professional Groups


- Disseminate and promote the use of WHO-CGS among private health practitioners
- Generate resources for the implementation of WHO-CGS by private sector

VI. REPEALING CLAUSE

Administrative Order No. 25 s. 2003 and all other orders and related issuances found inconsistent with the provisions of this issuance are hereby rescinded.

VII. EFFECTIVITY

This Order shall take effect immediately.


ESPERANZA I. CABRAL, MD
Secretary of Health



Checklist for the *OPT* Plus Team

The checklist ensures that all preparations before, during and after the conduct of *OPT* Plus are done. Indicate with a check if activity has been done.

Activities	Done	Remarks
<i>Prior to conduct of OPT Plus</i>		
<ul style="list-style-type: none"> • Rural Health Midwife, Barangay Nutrition Scholar and Barangay Health Workers coordinate with the Barangay Nutrition Committee on the schedule, place and time of <i>OPT</i> Plus • Identify task of <i>OPT</i> Plus Team members <ul style="list-style-type: none"> - who will post/inform the community on the <i>OPT</i> Plus schedule - who will update previous year's spot map - who will do what during conduct of <i>OPT</i> Plus - who will process <i>OPT</i> Plus data • Prepare tools/equipment to bring: <ul style="list-style-type: none"> - Calibrated weighing scale with strap, 2 hooks and 3 weighing pants (small, medium and large) - Rope (for hanging of weighing scale) - Verified Length/Height board - Weight-for-Age Table of Boys and Girls 0-71 Months - Length/Height-for-Age Table of Boys and Girls 0-71 Months - Weight-for-Length Table of Boys and Girls 0-23 Months - Weight-for-Height Table of Boys and Girls 0-71 Months - Age in Months Table - Masterlist of preschoolers - Family profile (optional) - <i>OPT</i> Plus Form 1 - Old spot map (previous year) and updated spot map - Pencils (at least 2) - Extra sheets of paper 		

Activities	Done	Remarks
<i>During conduct of OPT Plus</i>		
<ul style="list-style-type: none"> • Setting-up <ul style="list-style-type: none"> - Hang the calibrated weighing scale securely - Organize preschoolers and mothers/caregivers - List down names/check name and other information from Masterlist • Actual measurement day <ul style="list-style-type: none"> - Compute for the age in months - Measure preschoolers (weight and height) - Refer mother or caregiver to the Barangay Health Center/Rural Health unit/clinic if the child is obviously underweight, overweight and ill for counseling and/or treatment 		
<i>After conduct of OPT Plus</i>		
<ul style="list-style-type: none"> • BNS and BHW <ul style="list-style-type: none"> - Validate (double check or 48recomputed) the age in months and nutritional status - fill up OPT Plus Forms 1A and 1B - Update spot map and Masterlist - Visit the mother/caregiver of children who were identified as underweight or overweight and refer the health center/clinic. Advise them to bring the child every month to the health center/clinic for growth monitoring • Submit the OPT Plus results to the midwife for checking of results • Upon approval of the midwife, present the OPT Plus results to BNC preferably during the 1st quarter meeting. Request for a special BNC meeting if necessary where the updated spot map can also be discussed and updated barangay profile could be presented. The BNC can then proceed with reviewing/formulating the barangay problem tree and planning the interventions • Submit filled up OPT Plus Form 1A to C/MNAO who will then consolidate the results of barangay OPT Plus and present the results to the C/MNC, preferably during the 1st quarter meeting of the C/MNC 		

Steps on Calibration and Verification of Weighing Scales

Definition

Calibration is the checking and adjusting of the weighing scale within the possible and allowable error. It is important to calibrate to make sure that scale is within the tolerable limits of accuracy and to detect deterioration beyond the permissible levels.

Procedures in calibrating:

1. Clear and free the scale from any foreign objects or attachments that could hamper its operation.
2. Make sure that there are no loose parts such as screw of the platform.
3. Make sure that the adjusting screw is functioning properly.
4. Check whether the dial pointer rotates smoothly with no noticeable or visible obstruction.
5. For hanging type scale with dual face, make sure that the readings on both sides are the same.
6. For table type scale, place the scale on evenly leveled surface
7. Perform the following steps in calibration:
 - a. Calibrate using standard test weights, available usually in 2, 5 and 10kg.
 - Perform the increasing load test and the decreasing load test at the 10%, 25%, 50% and nearly 100% of the capacity of the weighing scale.
 - Take 3 readings for each of the standard weight indicated.
 - Get the average reading and the difference between the applied weight and the average reading.
 - For the applied weight with more than the permissible error, move adjustment screw and return to “0” balance
 - Repeat taking 3 readings, get the average and permissible error
 - If still more than the permissible error, have the scale repaired or condemned.

*Note: Some DOST regional offices and **PAO**-accredited laboratories offer calibration services at reasonable cost. Ideally, weighing scales should be submitted to the laboratory for calibration at least once a year.*

Verification is done to check if the weighing scale's calibration results have not changed significantly since it had its last calibration.

Procedures in verifying:

1. Clear and free the scale from any foreign objects or attachments that could hamper its operation.
2. Make sure that there are no loose parts such as screw of the platform.
3. Make sure that the adjusting screw is functioning properly.
4. Check whether the dial pointer rotates smoothly with no noticeable or visible obstruction.
5. For hanging type scale with dual face, make sure that the readings on both sides are the same.
6. For table type scale, place the scale on evenly leveled surface
7. Perform the following steps in calibration:
 - Verify using just one (1) standard test weight, usually close o the full capacity (not less than 80%) of the weighing scale being checked.
 - Perform the weighing at the center of the weighing scale's pan.
 - Take 3 readings using the standard test weight.
 - Get the average reading and the difference between the applied weight and the average reading.
 - If the computed difference in the verification has not significantly changed as compared to the computed difference from the weighing scale's last calibration results, then the weighing scale is fit for use. Otherwise, the weighing scale needs to be recalibrated.

Note: It is recommended that verification of weighing scales is performed more often between the calibration interval. Ideally, if the calibration interval of the weighing scale is one (1) year, the verification is done every month or every quarter depending on the usage of the weighing scale.

Care and Maintenance of Weighing Scale and Height Board

Maintenance is the process of always keeping the weighing scale/height board in good operating condition. It includes:

1. Simple housekeeping measures
2. Lubrication
3. Corrosion control
4. Servicing
5. Repair/Replacement of worn out parts
6. Storage and handling
7. Record keeping

A. Weighing Scales:

To prolong the useful life of the weighing scale, check for the following factors:

1. Normal wear and tear. Normal usage causes wear especially of the moving parts. Through time, weighing scale in use or in storage undergoes normal wear and tear.
2. Vibration from handling and movements causes misalignment of moving parts
3. Contamination from dust and other particles. The presence of dust/other foreign particles causes friction and corrosion.
4. Exposure to the elements such as dampness and humidity which cause corrosion.

Regular Preventive Work

1. Always keep the weighing scale clean. Wipe with wet cloth, then with dry cloth daily and after each use.
2. Apply oil to the moving parts every week. This can be done by an oil dispenser.
3. Wash the crib twice a month.
4. Store and keep weighing scale only in a dry place. Do not expose scale to moisture.
5. Wrap or cover weighing scale with plastic when storing.
6. Apply anti-rust products if available.
7. Maintain a regular maintenance record. Use the maintenance and calibration form.

B. Height Board

1. Use the height board properly according to its specific purpose.
2. Conduct regular tightness checks of all screws and bolts for safety.
3. Conduct regular visual inspection of the height board to check the board quality and avoid potential risk to children while in-service.
4. Transport or transfer the board from one place to another properly. Do not drag.
5. Replace parts when necessary following the standard specifications in the fabrication of the height board.
6. Re-apply finishing when the height board in service needs supplemental finishes to retain its appearance. Excessive used can cause damage to both the finish and wood itself.
7. Let the kids stand on the board barefooted not only to obtain accurate measurements but also to avoid damage on the surface of the foot board.
8. Regularly clean with a soft, clean and dry cloth to keep the height board looking good.
9. Keep and store the height board in adequately dry area. Do not expose to water, excessive heat and direct sunlight.

OPT Plus Guidelines Attachment 6a

Republic of the Philippines
Department of Health
NATIONAL NUTRITION COUNCIL

Age in Months Table, 2011

Month of Weighing: **JANUARY**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	0	12	24	36	48	60	
2 February		11	23	35	47	59	71
3 March		10	22	34	46	58	70
4 April		9	21	33	45	57	69
5 May		8	20	32	44	56	68
6 June		7	19	31	43	55	67
7 July		6	18	30	42	54	66
8 August		5	17	29	41	53	65
9 September		4	16	28	40	52	64
10 October		3	15	27	39	51	63
11 November		2	14	26	38	50	62
12 December		1	13	25	37	49	61

Month of Weighing: **FEBRUARY**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	1	13	25	37	49	61	
2 February	0	12	24	36	48	60	
3 March		11	23	35	47	59	71
4 April		10	22	34	46	58	70
5 May		9	21	33	45	57	69
6 June		8	20	32	44	56	68
7 July		7	19	31	43	55	67
8 August		6	18	30	42	54	66
9 September		5	17	29	41	53	65
10 October		4	16	28	40	52	64
11 November		3	15	27	39	51	63
12 December		2	14	26	38	50	62

Note: This age-in-months table may be updated for succeeding years. Updating may be done by assigning the number “0” on the month of weighing of the present year and then numbering the previous month as “1”, then “2, 3, 4...” for the prior months until “71” months is reached.

Age in Months Table, 2011

Month of Weighing: **MARCH**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	2	14	26	38	50	62	
2 February	1	13	25	37	49	61	
3 March	0	12	24	36	48	60	
4 April		11	23	35	47	59	71
5 May		10	22	34	46	58	70
6 June		9	21	33	45	57	69
7 July		8	20	32	44	56	68
8 August		7	19	31	43	55	67
9 September		6	18	30	42	54	66
10 October		5	17	29	41	53	65
11 November		4	16	28	40	52	64
12 December		3	15	27	39	51	63

Month of Weighing: **APRIL**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	3	15	27	39	51	63	
2 February	2	14	26	38	50	62	
3 March	1	13	25	37	49	61	
4 April	0	12	24	36	48	60	
5 May		11	23	35	47	59	71
6 June		10	22	34	46	58	70
7 July		9	21	33	45	57	69
8 August		8	20	32	44	56	68
9 September		7	19	31	43	55	67
10 October		6	18	30	42	54	66
11 November		5	17	29	41	53	65
12 December		4	16	28	40	52	64

Age in Months Table, 2011

Month of Weighing: **MAY**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	4	16	28	40	52	64	
2 February	3	15	27	39	51	63	
3 March	2	14	26	38	50	62	
4 April	1	13	25	37	49	61	
5 May	0	12	24	36	48	60	
6 June		11	23	35	47	59	71
7 July		10	22	34	46	58	70
8 August		9	21	33	45	57	69
9 September		8	20	32	44	56	68
10 October		7	19	31	43	55	67
11 November		6	18	30	42	54	66
12 December		5	17	29	41	53	65

Month of Weighing: **JUNE**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	5	17	29	41	53	65	
2 February	4	16	28	40	52	64	
3 March	3	15	27	39	51	63	
4 April	2	14	26	38	50	62	
5 May	1	13	25	37	49	61	
6 June	0	12	24	36	48	60	
7 July		11	23	35	47	59	71
8 August		10	22	34	46	58	70
9 September		9	21	33	45	57	69
10 October		8	20	32	44	56	68
11 November		7	19	31	43	55	67
12 December		6	18	30	42	54	66

Age in Months Table, 2011

Month of Weighing: **JULY**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	6	18	30	42	54	66	
2 February	5	17	29	41	53	65	
3 March	4	16	28	40	52	64	
4 April	3	15	27	39	51	63	
5 May	2	14	26	38	50	62	
6 June	1	13	25	37	49	61	
7 July	0	12	24	36	48	60	
8 August		11	23	35	47	59	71
9 September		10	22	34	46	58	70
10 October		9	21	33	45	57	69
11 November		8	20	32	44	56	68
12 December		7	19	31	43	55	67

Month of Weighing: **AUGUST**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	7	19	31	43	55	67	
2 February	6	18	30	42	54	66	
3 March	5	17	29	41	53	65	
4 April	4	16	28	40	52	64	
5 May	3	15	27	39	51	63	
6 June	2	14	26	38	50	62	
7 July	1	13	25	37	49	61	
8 August	0	12	24	36	48	60	
9 September		11	23	35	47	59	71
10 October		10	22	34	46	58	70
11 November		9	21	33	45	57	69
12 December		8	20	32	44	56	68

Age in Months Table, 2011

Month of Weighing: **SEPTEMBER**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	8	20	32	44	56	68	
2 February	7	19	31	43	55	67	
3 March	6	18	30	42	54	66	
4 April	5	17	29	41	53	65	
5 May	4	16	28	40	52	64	
6 June	3	15	27	39	51	63	
7 July	2	14	26	38	50	62	
8 August	1	13	25	37	49	61	
9 September	0	12	24	36	48	60	
10 October		11	23	35	47	59	71
11 November		10	22	34	46	58	70
12 December		9	21	33	45	57	69

Month of Weighing: **OCTOBER**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	9	21	33	45	57	69	
2 February	8	20	32	44	56	68	
3 March	7	19	31	43	55	67	
4 April	6	18	30	42	54	66	
5 May	5	17	29	41	53	65	
6 June	4	16	28	40	52	64	
7 July	3	15	27	39	51	63	
8 August	2	14	26	38	50	62	
9 September	1	13	25	37	49	61	
10 October	0	12	24	36	48	60	
11 November		11	23	35	47	59	71
12 December		10	22	34	46	58	70

Age in Months Table, 2011

Month of Weighing: **NOVEMBER**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	10	22	34	46	58	70	
2 February	9	21	33	45	57	69	
3 March	8	20	32	44	56	68	
4 April	7	19	31	43	55	67	
5 May	6	18	30	42	54	66	
6 June	5	17	29	41	53	65	
7 July	4	16	28	40	52	64	
8 August	3	15	27	39	51	63	
9 September	2	14	26	38	50	62	
10 October	1	13	25	37	49	61	
11 November	0	12	24	36	48	60	
12 December		11	23	35	47	59	71

Month of Weighing: **DECEMBER**

Month of Birth	Year of Birth						
	Present Year	2010	2009	2008	2007	2006	2005
1 January	11	23	35	47	59	71	
2 February	10	22	34	46	58	70	
3 March	9	21	33	45	57	69	
4 April	8	20	32	44	56	68	
5 May	7	19	31	43	55	67	
6 June	6	18	30	42	54	66	
7 July	5	17	29	41	53	65	
8 August	4	16	28	40	52	64	
9 September	3	15	27	39	51	63	
10 October	2	14	26	38	50	62	
11 November	1	13	25	37	49	61	
12 December	0	12	24	36	48	60	

OPT Plus Guidelines Attachment 6b

Republic of the Philippines
Department of Health
NATIONAL NUTRITION COUNCIL

Age in Months Table, 2012

Month of Weighing: **JANUARY**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	0	12	24	36	48	60	
2 February		11	23	35	47	59	71
3 March		10	22	34	46	58	70
4 April		9	21	33	45	57	69
5 May		8	20	32	44	56	68
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9 September		4	16	28	40	52	64
10 October		3	15	27	39	51	63
11 November		2	14	26	38	50	62
12 December		1	13	25	37	49	61

Month of Weighing: **FEBRUARY**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	1	13	25	37	49	61	
2 February	0	12	24	36	48	60	
3 March		11	23	35	47	59	71
4 April		10	22	34	46	58	70
5 May		9	21	33	45	57	69
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11 November		3	15	27	39	51	63
12 December		2	14	26	38	50	62

Note: This age-in-months table may be updated for succeeding years. Updating may be done by assigning the number “0” on the month of weighing of the present year and then numbering the previous month as “1”, then “2, 3, 4...” for the prior months until “71” months is reached.

Age in Months Table, 2012

Month of Weighing: **MARCH**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	2	14	26	38	50	62	
2 February	1	13	25	37	49	61	
3 March	0	12	24	36	48	60	
4 April		11	23	35	47	59	71
5 May		10	22	34	46	58	70
6 June		9	21	33	45	57	69
7 July		8	20	32	44	56	68
8 August		7	19	31	43	55	67
9 September		6	18	30	42	54	66
10 October		5	17	29	41	53	65
11 November		4	16	28	40	52	64
12 December		3	15	27	39	51	63

Month of Weighing: **APRIL**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	3	15	27	39	51	63	
2 February	2	14	26	38	50	62	
3 March	1	13	25	37	49	61	
4 April	0	12	24	36	48	60	
5 May		11	23	35	47	59	71
6 June		10	22	34	46	58	70
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8 August		8	20	32	44	56	68
9 September		7	19	31	43	55	67
10 October		6	18	30	42	54	66
11 November		5	17	29	41	53	65
12 December		4	16	28	40	52	64

Age in Months Table, 2012

Month of Weighing: **MAY**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	4	16	28	40	52	64	
2 February	3	15	27	39	51	63	
3 March	2	14	26	38	50	62	
4 April	1	13	25	37	49	61	
5 May	0	12	24	36	48	60	
6 June		11	23	35	47	59	71
7 July		10	22	34	46	58	70
8 August		9	21	33	45	57	69
9 September		8	20	32	44	56	68
10 October		7	19	31	43	55	67
11 November		6	18	30	42	54	66
12 December		5	17	29	41	53	65

Month of Weighing: **JUNE**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	5	17	29	41	53	65	
2 February	4	16	28	40	52	64	
3 March	3	15	27	39	51	63	
4 April	2	14	26	38	50	62	
5 May	1	13	25	37	49	61	
6 June	0	12	24	36	48	60	
7 July		11	23	35	47	59	71
8 August		10	22	34	46	58	70
9 September		9	21	33	45	57	69
10 October		8	20	32	44	56	68
11 November		7	19	31	43	55	67
12 December		6	18	30	42	54	66

Age in Months Table, 2012

Month of Weighing: **JULY**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	6	18	30	42	54	66	
2 February	5	17	29	41	53	65	
3 March	4	16	28	40	52	64	
4 April	3	15	27	39	51	63	
5 May	2	14	26	38	50	62	
6 June	1	13	25	37	49	61	
7 July	0	12	24	36	48	60	
8 August		11	23	35	47	59	71
9 September		10	22	34	46	58	70
10 October		9	21	33	45	57	69
11 November		8	20	32	44	56	68
12 December		7	19	31	43	55	67

Month of Weighing: **AUGUST**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	7	19	31	43	55	67	
2 February	6	18	30	42	54	66	
3 March	5	17	29	41	53	65	
4 April	4	16	28	40	52	64	
5 May	3	15	27	39	51	63	
6 June	2	14	26	38	50	62	
7 July	1	13	25	37	49	61	
8 August	0	12	24	36	48	60	
9 September		11	23	35	47	59	71
10 October		10	22	34	46	58	70
11 November		9	21	33	45	57	69
12 December		8	20	32	44	56	68

Age in Months Table, 2012

Month of Weighing: **SEPTEMBER**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	8	20	32	44	56	68	
2 February	7	19	31	43	55	67	
3 March	6	18	30	42	54	66	
4 April	5	17	29	41	53	65	
5 May	4	16	28	40	52	64	
6 June	3	15	27	39	51	63	
7 July	2	14	26	38	50	62	
8 August	1	13	25	37	49	61	
9 September	0	12	24	36	48	60	
10 October		11	23	35	47	59	71
11 November		10	22	34	46	58	70
12 December		9	21	33	45	57	69

Month of Weighing: **OCTOBER**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	9	21	33	45	57	69	
2 February	8	20	32	44	56	68	
3 March	7	19	31	43	55	67	
4 April	6	18	30	42	54	66	
5 May	5	17	29	41	53	65	
6 June	4	16	28	40	52	64	
7 July	3	15	27	39	51	63	
8 August	2	14	26	38	50	62	
9 September	1	13	25	37	49	61	
10 October	0	12	24	36	48	60	
11 November		11	23	35	47	59	71
12 December		10	22	34	46	58	70

Age in Months Table, 2012

Month of Weighing: **NOVEMBER**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	10	22	34	46	58	70	
2 February	9	21	33	45	57	69	
3 March	8	20	32	44	56	68	
4 April	7	19	31	43	55	67	
5 May	6	18	30	42	54	66	
6 June	5	17	29	41	53	65	
7 July	4	16	28	40	52	64	
8 August	3	15	27	39	51	63	
9 September	2	14	26	38	50	62	
10 October	1	13	25	37	49	61	
11 November	0	12	24	36	48	60	
12 December		11	23	35	47	59	71

Month of Weighing: **DECEMBER**

Month of Birth	Year of Birth						
	Present Year	2011	2010	2009	2008	2007	2006
1 January	11	23	35	47	59	71	
2 February	10	22	34	46	58	70	
3 March	9	21	33	45	57	69	
4 April	8	20	32	44	56	68	
5 May	7	19	31	43	55	67	
6 June	6	18	30	42	54	66	
7 July	5	17	29	41	53	65	
8 August	4	16	28	40	52	64	
9 September	3	15	27	39	51	63	
10 October	2	14	26	38	50	62	
11 November	1	13	25	37	49	61	
12 December	0	12	24	36	48	60	

CHILD GROWTH STANDARDS

Weight (kg) for Age of Boys 0-71 Months ^{1/}



INSTRUCTIONS FOR USE

Upon computation of correct age-in-months, look for the point where the child's age-in-months in the first column intersects with the actual weight of the child in the column corresponding to the child's sex.

Age 2/ (months)	Weight					
	Severely Underweight	Underweight		Normal		Overweight
	< -3SD	-3 SD From	< -2 SD To	-2 SD From	+2 SD To	> +2 SD
0	2.1	2.2	2.4	2.5	4.4	4.5
1	2.9	3.0	3.3	3.4	5.8	5.9
2	3.8	3.9	4.2	4.3	7.1	7.2
3	4.4	4.5	4.9	5.0	8.0	8.1
4	4.9	5.0	5.5	5.6	8.7	8.8
5	5.3	5.4	5.9	6.0	9.3	9.4
6	5.7	5.8	6.3	6.4	9.8	9.9
7	5.9	6.0	6.6	6.7	10.3	10.4
8	6.2	6.3	6.8	6.9	10.7	10.8
9	6.4	6.5	7.0	7.1	11.0	11.1
10	6.6	6.7	7.3	7.4	11.4	11.5
11	6.8	6.9	7.5	7.6	11.7	11.8
12	6.9	7.0	7.6	7.7	12.0	12.1
13	7.1	7.2	7.8	7.9	12.3	12.4
14	7.2	7.3	8.0	8.1	12.6	12.7
15	7.4	7.5	8.2	8.3	12.8	12.9
16	7.5	7.6	8.3	8.4	13.1	13.2
17	7.7	7.8	8.5	8.6	13.4	13.5
18	7.8	7.9	8.7	8.8	13.7	13.8
19	8.0	8.1	8.8	8.9	13.9	14.0
20	8.1	8.2	9.0	9.1	14.2	14.3
21	8.2	8.3	9.1	9.2	14.5	14.6
22	8.4	8.5	9.3	9.4	14.7	14.8
23	8.5	8.6	9.4	9.5	15.0	15.1
24	8.6	8.7	9.6	9.7	15.3	15.4
25	8.8	8.9	9.7	9.8	15.5	15.6
26	8.9	9.0	9.9	10.0	15.8	15.9
27	9.0	9.1	10.0	10.1	16.1	16.2
28	9.1	9.2	10.1	10.2	16.3	16.4
29	9.2	9.3	10.3	10.4	16.6	16.7
30	9.4	9.5	10.4	10.5	16.9	17.0
31	9.5	9.6	10.6	10.7	17.1	17.2
32	9.6	9.7	10.7	10.8	17.4	17.5
33	9.7	9.8	10.8	10.9	17.6	17.7
34	9.8	9.9	10.9	11.0	17.8	17.9
35	9.9	10.0	11.1	11.2	18.1	18.2
36	10.0	10.1	11.2	11.3	18.3	18.4
37	10.1	10.2	11.3	11.4	18.6	18.7
38	10.2	10.3	11.4	11.5	18.8	18.9
39	10.3	10.4	11.5	11.6	19.0	19.1
40	10.4	10.5	11.7	11.8	19.3	19.4
41	10.5	10.6	11.8	11.9	19.5	19.6
42	10.6	10.7	11.9	12.0	19.7	19.8
43	10.7	10.8	12.0	12.1	20.0	20.1
44	10.8	10.9	12.1	12.2	20.2	20.3
45	10.9	11.0	12.3	12.4	20.5	20.6
46	11.0	11.1	12.4	12.5	20.7	20.8
47	11.1	11.2	12.5	12.6	20.9	21.0
48	11.2	11.3	12.6	12.7	21.2	21.3
49	11.3	11.4	12.7	12.8	21.4	21.5
50	11.4	11.5	12.8	12.9	21.7	21.8
51	11.5	11.6	13.0	13.1	21.9	22.0
52	11.6	11.7	13.1	13.2	22.2	22.3
53	11.7	11.8	13.2	13.3	22.4	22.5
54	11.8	11.9	13.3	13.4	22.7	22.8
55	11.9	12.0	13.4	13.5	22.9	23.0
56	12.0	12.1	13.5	13.6	23.2	23.3
57	12.1	12.2	13.6	13.7	23.4	23.5
58	12.2	12.3	13.7	13.8	23.7	23.8
59	12.3	12.4	13.9	14.0	23.9	24.0
60	12.4	12.5	14.0	14.1	24.2	24.3
61	12.7	12.8	14.3	14.4	24.3	24.4
62	12.8	12.9	14.4	14.5	24.4	24.5
63	13.0	13.1	14.5	14.6	24.7	24.8
64	13.1	13.2	14.7	14.8	24.9	25.0
65	13.2	13.3	14.8	14.9	25.2	25.3
66	13.3	13.4	14.9	15.0	25.5	25.6
67	13.4	13.5	15.1	15.2	25.7	25.8
68	13.6	13.7	15.2	15.3	26.0	26.1
69	13.7	13.8	15.3	15.4	26.3	26.4
70	13.8	13.9	15.5	15.6	26.6	26.7
71	13.9	14.0	15.6	15.7	26.8	26.9

1/ Based on the WHO Child Growth Standards, Methods and Development, 2006

2/ Age refers to the age of the child computed to the nearest month as of last birth date.

For example, a child born on 01 October 2004 and weighed on 21 August 2007 is 2 years, 10 months and 30 days.

Multiplying 2 years by 12 months and adding 10 months, the child will be 24 months plus 10 months or 34 months old.

Disregard the number of days in the computation of age in months.

3/ The column on overweight may be used only for the quick assessment of overweight in children when length or height data is not available. When these data are available, a child's weight should be compared against his/her height/length to determine if overweight or obese.

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CHILD GROWTH STANDARDS

Weight (kg) for Age of Girls 0-71 Months ^{1/}

INSTRUCTIONS FOR USE

Upon computation of correct age-in-months, look for the point where the child's age-in-months in the first column intersects with the actual weight of the child in the column corresponding to the child's sex.

Age 2/ (months)	Weight					
	Severely Underweight	Underweight		Normal		Overweight
		-3 SD From	<-2 SD To	-2 SD From	+2 SD To	
0	2.0	2.1	2.3	2.4	4.2	4.3
1	2.7	2.8	3.1	3.2	5.5	5.6
2	3.4	3.5	3.8	3.9	6.6	6.7
3	4.0	4.1	4.4	4.5	7.5	7.6
4	4.4	4.5	4.9	5.0	8.2	8.3
5	4.8	4.9	5.3	5.4	8.8	8.9
6	5.1	5.2	5.6	5.7	9.3	9.4
7	5.3	5.4	5.9	6.0	9.8	9.9
8	5.6	5.7	6.2	6.3	10.2	10.3
9	5.8	5.9	6.4	6.5	10.5	10.6
10	5.9	6.0	6.6	6.7	10.9	11.0
11	6.1	6.2	6.8	6.9	11.2	11.3
12	6.3	6.4	6.9	7.0	11.5	11.6
13	6.4	6.5	7.1	7.2	11.8	11.9
14	6.6	6.7	7.3	7.4	12.1	12.2
15	6.7	6.8	7.5	7.6	12.4	12.5
16	6.9	7.0	7.6	7.7	12.6	12.7
17	7.0	7.1	7.8	7.9	12.9	13.0
18	7.2	7.3	8.0	8.1	13.2	13.3
19	7.3	7.4	8.1	8.2	13.5	13.6
20	7.5	7.6	8.3	8.4	13.7	13.8
21	7.6	7.7	8.5	8.6	14.0	14.1
22	7.8	7.9	8.6	8.7	14.3	14.4
23	7.9	8.0	8.8	8.9	14.6	14.7
24	8.1	8.2	8.9	9.0	14.8	14.9
25	8.2	8.3	9.1	9.2	15.1	15.2
26	8.4	8.5	9.3	9.4	15.4	15.5
27	8.5	8.6	9.4	9.5	15.7	15.8
28	8.6	8.7	9.6	9.7	16.0	16.1
29	8.8	8.9	9.7	9.8	16.2	16.3
30	8.9	9.0	9.9	10.0	16.5	16.6
31	9.0	9.1	10.0	10.1	16.8	16.9
32	9.1	9.2	10.2	10.3	17.1	17.2
33	9.3	9.4	10.3	10.4	17.3	17.4
34	9.4	9.5	10.4	10.5	17.6	17.7
35	9.5	9.6	10.6	10.7	17.9	18.0
36	9.6	9.7	10.7	10.8	18.1	18.2
37	9.7	9.8	10.8	10.9	18.4	18.5
38	9.8	9.9	11.0	11.1	18.7	18.8
39	9.9	10.0	11.1	11.2	19.0	19.1
40	10.1	10.2	11.2	11.3	19.2	19.3
41	10.2	10.3	11.4	11.5	19.5	19.6
42	10.3	10.4	11.5	11.6	19.8	19.9
43	10.4	10.5	11.6	11.7	20.1	20.2
44	10.5	10.6	11.7	11.8	20.4	20.5
45	10.6	10.7	11.9	12.0	20.7	20.8
46	10.7	10.8	12.0	12.1	20.9	21.0
47	10.8	10.9	12.1	12.2	21.2	21.3
48	10.9	11.0	12.2	12.3	21.5	21.6
49	11.0	11.1	12.3	12.4	21.8	21.9
50	11.1	11.2	12.4	12.5	22.1	22.2
51	11.2	11.3	12.6	12.7	22.4	22.5
52	11.3	11.4	12.7	12.8	22.6	22.7
53	11.4	11.5	12.8	12.9	22.9	23.0
54	11.5	11.6	12.9	13.0	23.2	23.3
55	11.6	11.7	13.1	13.2	23.5	23.6
56	11.7	11.8	13.2	13.3	23.8	23.9
57	11.8	11.9	13.3	13.4	24.1	24.2
58	11.9	12.0	13.4	13.5	24.4	24.5
59	12.0	12.1	13.5	13.6	24.6	24.7
60	12.1	12.2	13.6	13.7	24.7	24.8
61	12.4	12.5	13.9	14.0	24.8	24.9
62	12.5	12.6	14.0	14.1	25.1	25.2
63	12.6	12.7	14.1	14.2	25.4	25.5
64	12.7	12.8	14.2	14.3	25.6	25.7
65	12.8	12.9	14.3	14.4	25.9	26.0
66	12.9	13.0	14.5	14.6	26.2	26.3
67	13.0	13.1	14.6	14.7	26.5	26.6
68	13.1	13.2	14.7	14.8	26.7	26.8
69	13.2	13.3	14.8	14.9	27.0	27.1
70	13.3	13.4	14.9	15.0	27.3	27.4
71	13.4	13.5	15.1	15.2	27.6	27.7

1/ Based on the WHO Child Growth Standards, Methods and Development, 2006

2/ Age refers to the age of the child computed to the nearest month as of last birth date.

For example, a child born on 01 October 2004 and weighed on 21 August 2007 is 2 years, 10 months and 30 days.

Multiplying 2 years by 12 months and adding 10 months, the child will be 24 months plus 10 months or 34 months old.

Disregard the number of days in the computation of age in months.

3/ The column on overweight may be used only for the quick assessment of overweight in children when length or height data is not available. When these data are available, a child's weight should be compared against his/her height/length to determine if overweight or obese.

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CHILD GROWTH STANDARDS TABLE ^{1/} 4/Length/Height (cm) for Age, for Boys ^{2/3/}

INSTRUCTIONS FOR USE

Upon computation of correct age in months, look for the point where the child's age in months intersects with the actual length/height of the child. Depending on which column the child's length/height falls, classify the child as stunted, severely stunted, normal, or tall.

Age (months)	Length (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
0	44.1	44.2	46.0	46.1	53.7	53.8
1	48.8	48.9	50.7	50.8	58.6	58.7
2	52.3	52.4	54.3	54.4	62.4	62.5
3	55.2	55.3	57.2	57.3	65.5	65.6
4	57.5	57.6	59.6	59.7	68.0	68.1
5	59.5	59.6	61.6	61.7	70.1	70.2
6	61.1	61.2	63.2	63.3	71.9	72.0
7	62.6	62.7	64.7	64.8	73.5	73.6
8	63.9	64.0	66.1	66.2	75.0	75.1
9	65.1	65.2	67.4	67.5	76.5	76.6
10	66.3	66.4	68.6	68.7	77.9	78.0
11	67.5	67.6	69.8	69.9	79.2	79.3

Age (months)	Length (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
12	68.5	68.6	70.9	71.0	80.5	80.6
13	69.5	69.6	72.0	72.1	81.8	81.9
14	70.5	70.6	73.0	73.1	83.0	83.1
15	71.5	71.6	74.0	74.1	84.2	84.3
16	72.4	72.5	74.9	75.0	85.4	85.5
17	73.2	73.3	75.9	76.0	86.5	86.6
18	74.1	74.2	76.8	76.9	87.7	87.8
19	74.9	75.0	77.6	77.7	88.8	88.9
20	75.7	75.8	78.5	78.6	89.8	89.9
21	76.4	76.5	79.3	79.4	90.9	91.0
22	77.1	77.2	80.1	80.2	91.9	92.0
23	77.9	78.0	80.9	81.0	92.9	93.0

Age (months)	Height (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
24	77.9	78.0	80.9	81.0	93.2	93.3
25	78.5	78.6	81.6	81.7	94.2	94.3
26	79.2	79.3	82.4	82.5	95.2	95.3
27	79.8	79.9	83.0	83.1	96.1	96.2
28	80.4	80.5	83.7	83.8	97.0	97.1
29	81.0	81.1	84.4	84.5	97.9	98.0
30	81.6	81.7	85.0	85.1	98.7	98.8
31	82.2	82.3	85.6	85.7	99.6	99.7
32	82.7	82.8	86.3	86.4	100.4	100.5
33	83.3	83.4	86.8	86.9	101.2	101.3
34	83.8	83.9	87.4	87.5	102.0	102.1
35	84.3	84.4	88.0	88.1	102.7	102.8
36	84.9	85.0	88.6	88.7	103.5	103.6
37	85.4	85.5	89.1	89.2	104.2	104.3
38	85.9	86.0	89.7	89.8	105.0	105.1
39	86.4	86.5	90.2	90.3	105.7	105.8
40	86.9	87.0	90.8	90.9	106.4	106.5
41	87.4	87.5	91.3	91.4	107.1	107.2
42	87.9	88.0	91.8	91.9	107.8	107.9
43	88.3	88.4	92.3	92.4	108.5	108.6
44	88.8	88.9	92.9	93.0	109.1	109.2
45	89.3	89.4	93.4	93.5	109.8	109.9
46	89.7	89.8	93.9	94.0	110.4	110.5
47	90.2	90.3	94.3	94.4	111.1	111.2

Age (months)	Height (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
48	90.6	90.7	94.8	94.9	111.7	111.8
49	91.1	91.2	95.3	95.4	112.4	112.5
50	91.5	91.6	95.8	95.9	113.0	113.1
51	92.0	92.1	96.3	96.4	113.6	113.7
52	92.4	92.5	96.8	96.9	114.2	114.3
53	92.9	93.0	97.3	97.4	114.9	115.0
54	93.3	93.4	97.7	97.8	115.5	115.6
55	93.8	93.9	98.2	98.3	116.1	116.2
56	94.2	94.3	98.7	98.8	116.7	116.8
57	94.6	94.7	99.2	99.3	117.4	117.5
58	95.1	95.2	99.6	99.7	118.0	118.1
59	95.5	95.6	100.1	100.2	118.6	118.7
60	96.0	96.1	100.6	100.7	119.2	119.3
61	96.4	96.5	101.0	101.1	119.4	119.5
62	96.8	96.9	101.5	101.6	120.0	120.1
63	97.3	97.4	101.9	102.0	120.6	120.7
64	97.7	97.8	102.4	102.5	121.2	121.3
65	98.1	98.2	102.9	103.0	121.8	121.9
66	98.6	98.7	103.3	103.4	122.4	122.5
67	99.0	99.1	103.8	103.9	123.0	123.1
68	99.4	99.5	104.2	104.3	123.6	123.7
69	99.8	99.9	104.7	104.8	124.1	124.2
70	100.3	100.4	105.1	105.2	124.7	124.8
71	100.7	100.8	105.6	105.7	125.2	125.3

1/ WHO Child Growth Standards (WHO-CGS) 2004 and WHO Reference Data, 2006

2/ To compute for the age in months, compute the child's age to the nearest month as of his last birth date. For example, a child born on 01 October 2004 and measured on 21 August 2007 is 2 years, 10 months and 20 days. Disregarding the number of days, the child is 34 months old (2 years multiplied by 12, plus 10 months equals 34 months).

3/ If a child is 0-23 months old, measure the child's length (lying down (recumbent)). If the child is 24-71 months old, measure the child's standing height. If a child who is 0-23 months old will not lie down for measurement of length, the standing height may be measured. Just add 0.7 cm. to convert to length then proceed in classifying the child as instructed above. Reversely, a child 24-71 months old who will not stand up may be measured lying down. Just deduct 0.7 cm. from the reading to convert to height and then, proceed with the classification.


4/ This table is also downloadable at www.nnc.gov.ph



Prepared by:
NATIONAL NUTRITION COUNCIL, DCH
2002 China Road, Avenue Extension
Western Division, Taguig City
Tel. No.: (02) 886-6556 or (02) 886-5824
email address: nnc@nnc.gov.ph or ncd_nnc@yahoo.com

CHILD GROWTH STANDARDS TABLE ^{1, 2}
Length/Height (cm) for Age, for Girls ^{3, 4}

INSTRUCTIONS FOR USE
Upon computation of correct age in months, look for the point where the child's age in months intersects with the actual length/height of the child. Depending on which column the child's length/height falls, classify the child as stunted, severely stunted, normal, or tall.



Age (months)	Length (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
0	43.5	43.6	45.3	45.4	52.9	53.0
1	47.7	47.8	49.7	49.8	57.6	57.7
2	50.9	51.0	52.9	53.0	61.1	61.2
3	53.4	53.5	55.5	55.6	64.0	64.1
4	55.5	55.6	57.7	57.8	66.4	66.5
5	57.3	57.4	59.5	59.6	68.5	68.6
6	58.8	58.9	61.1	61.2	70.3	70.4
7	60.2	60.3	62.6	62.7	71.9	72.0
8	61.6	61.7	63.9	64.0	73.5	73.6
9	62.8	62.9	65.2	65.3	75.0	75.1
10	64.0	64.1	66.4	66.5	76.4	76.5
11	65.1	65.2	67.6	67.7	77.8	77.9


Age (months)	Length (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
12	66.2	66.3	68.8	68.9	79.2	79.3
13	67.2	67.3	69.9	70.0	80.5	80.6
14	68.2	68.3	70.9	71.0	81.7	81.8
15	69.2	69.3	71.9	72.0	83.0	83.1
16	70.1	70.2	72.9	73.0	84.2	84.3
17	71.0	71.1	73.9	74.0	85.4	85.5
18	71.9	72.0	74.8	74.9	86.5	86.6
19	72.7	72.8	75.7	75.8	87.6	87.7
20	73.6	73.7	76.6	76.7	88.7	88.8
21	74.4	74.5	77.4	77.5	89.8	89.9
22	75.1	75.2	78.3	78.4	90.8	90.9
23	75.9	76.0	79.1	79.2	91.9	92.0

Age (months)	Height (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
24	75.9	76.0	79.2	79.3	92.2	92.3
25	76.7	76.8	79.9	80.0	93.1	93.2
26	77.4	77.5	80.7	80.8	94.1	94.2
27	78.0	78.1	81.4	81.5	95.0	95.1
28	78.7	78.8	82.1	82.2	96.0	96.1
29	79.4	79.5	82.8	82.9	96.9	97.0
30	80.0	80.1	83.5	83.6	97.7	97.8
31	80.6	80.7	84.2	84.3	98.6	98.7
32	81.2	81.3	84.8	84.9	99.4	99.5
33	81.8	81.9	85.5	85.6	100.3	100.4
34	82.4	82.5	86.1	86.2	101.1	101.2
35	83.0	83.1	86.7	86.8	101.9	102.0
36	83.5	83.6	87.3	87.4	102.7	102.8
37	84.1	84.2	87.9	88.0	103.4	103.5
38	84.6	84.7	88.5	88.6	104.2	104.3
39	85.2	85.3	89.1	89.2	105.0	105.1
40	85.7	85.8	89.7	89.8	105.7	105.8
41	86.2	86.3	90.3	90.4	106.4	106.5
42	86.7	86.8	90.8	90.9	107.2	107.3
43	87.3	87.4	91.4	91.5	107.9	108.0
44	87.8	87.9	91.9	92.0	108.6	108.7
45	88.3	88.4	92.4	92.5	109.3	109.4
46	88.8	88.9	93.0	93.1	110.0	110.1
47	89.2	89.3	93.5	93.6	110.7	110.8

Age (months)	Height (cm)					
	Severely Stunted	Stunted		Normal		Tall
		From	To	From	To	
	< -3SD	-3SD	< -2SD	-2SD	+2SD	> +2SD
48	89.7	89.8	94.0	94.1	111.3	111.4
49	90.2	90.3	94.5	94.6	112.0	112.1
50	90.6	90.7	95.0	95.1	112.7	112.8
51	91.1	91.2	95.5	95.6	113.3	113.4
52	91.6	91.7	96.0	96.1	114.0	114.1
53	92.0	92.1	96.5	96.6	114.6	114.7
54	92.5	92.6	97.0	97.1	115.2	115.3
55	92.9	93.0	97.5	97.6	115.9	116.0
56	93.3	93.4	98.0	98.1	116.5	116.6
57	93.8	93.9	98.4	98.5	117.1	117.2
58	94.2	94.3	98.9	99.0	117.7	117.8
59	94.6	94.7	99.4	99.5	118.3	118.4
60	95.1	95.2	99.8	99.9	118.9	119.0
61	95.2	95.3	100.0	100.1	119.1	119.2
62	95.6	95.7	100.4	100.5	119.7	119.8
63	96.0	96.1	100.9	101.0	120.3	120.4
64	96.4	96.5	101.3	101.4	120.9	121.0
65	96.9	97.0	101.8	101.9	121.5	121.6
66	97.3	97.4	102.2	102.3	122.0	122.1
67	97.7	97.8	102.6	102.7	122.6	122.7
68	98.1	98.2	103.1	103.2	123.2	123.3
69	98.5	98.6	103.5	103.6	123.7	123.8
70	98.9	99.0	103.9	104.0	124.3	124.4
71	99.3	99.4	104.4	104.5	124.8	124.9

1/ WHO Child Growth Standards (WHO-CGSI) 2004 and WHO Reference Data, 2006
2/ To compute for the age in months, compute the child's age to the nearest month as of her last birthday. For example, a child born on 01 October 2004 and measured on 21 August 2007 is 2 years, 10 months and 20 days. Disregarding the number of days, the child is 34 months old (2 years multiplied by 12, plus 10 months equals 34 months).
3/ If a child is 0-23 months old, measure the child's length lying down (recumbent). If the child is 24-71 months old, measure the child's standing height. If a child who is 0-23 months old will not lie down for measurement of length, the standing height may be measured. Just add 0.7 cm. to convert to length then proceed in classifying the child as instructed above. Reversely, a child 24-71 months old who will not stand up may be measured lying down. Just deduct 0.7 cm. from the reading to convert to height and then, proceed with the classification.
4/ This table is also downloadable at www.nnc.gov.ph

Prepared by:
NATIONAL NUTRITION COUNCIL, DENR
2000 China Road, Avenue Extension
Binondo, Manila, Taguig City
Tel. No.: (02) 855-4034 or (02) 855-5826
email address: nutrition@nnc.gov.ph or nnr@nnc.gov.ph



CHILD GROWTH STANDARDS TABLE ^{1/2/}
Weight (kg) for Length (cm) of Boys 0-23 Months



INSTRUCTIONS FOR USE

Upon taking the child's length, round off the actual reading to the nearest 0.5 cm. For instance, for a child 51.3 cm. in length, refer to row 51.5 cm. or if a child's length is 58.3 cm. refer to row 58.5 cm. Depending under which column the weight of the child falls, classify the child as severely wasted, wasted, normal, overweight or obese.

Length (cm)	Weight (kg)							
	Severely Wasted	Wasted		Normal		Overweight		Obese
	< -3SD	-3SD	-2SD	-2SD	+2SD	+2SD	+3SD	> +3SD
45.0	1.8	1.9	1.9	2.0	3.0	3.1	3.3	3.4
45.5	1.8	1.9	2.0	2.1	3.1	3.2	3.4	3.5
46.0	1.9	2.0	2.1	2.2	3.1	3.2	3.5	3.6
46.5	2.0	2.1	2.2	2.3	3.2	3.3	3.6	3.7
47.0	2.0	2.1	2.2	2.3	3.3	3.4	3.7	3.8
47.5	2.1	2.2	2.3	2.4	3.4	3.5	3.8	3.9
48.0	2.2	2.3	2.4	2.5	3.6	3.7	3.9	4.0
48.5	2.2	2.3	2.5	2.6	3.7	3.8	4.0	4.1
49.0	2.3	2.4	2.5	2.6	3.8	3.9	4.2	4.3
49.5	2.4	2.5	2.6	2.7	3.9	4.0	4.3	4.4
50.0	2.5	2.6	2.7	2.8	4.0	4.1	4.4	4.5
50.5	2.6	2.7	2.8	2.9	4.1	4.2	4.5	4.6
51.0	2.6	2.7	2.9	3.0	4.2	4.3	4.7	4.8
51.5	2.7	2.8	3.0	3.1	4.4	4.5	4.8	4.9
52.0	2.8	2.9	3.1	3.2	4.5	4.6	5.0	5.1
52.5	2.9	3.0	3.2	3.3	4.6	4.7	5.1	5.2
53.0	3.0	3.1	3.3	3.4	4.8	4.9	5.3	5.4
53.5	3.1	3.2	3.4	3.5	4.9	5.0	5.4	5.5
54.0	3.2	3.3	3.5	3.6	5.1	5.2	5.6	5.7
54.5	3.3	3.4	3.6	3.7	5.3	5.4	5.8	5.9
55.0	3.5	3.6	3.7	3.8	5.4	5.5	6.0	6.1
55.5	3.6	3.7	3.9	4.0	5.6	5.7	6.1	6.2
56.0	3.7	3.8	4.0	4.1	5.8	5.9	6.3	6.4
56.5	3.8	3.9	4.1	4.2	5.9	6.0	6.5	6.6
57.0	3.9	4.0	4.2	4.3	6.1	6.2	6.7	6.8
57.5	4.0	4.1	4.4	4.5	6.3	6.4	6.9	7.0
58.0	4.2	4.3	4.5	4.6	6.4	6.5	7.1	7.2
58.5	4.3	4.4	4.6	4.7	6.6	6.7	7.2	7.3
59.0	4.4	4.5	4.7	4.8	6.8	6.9	7.4	7.5
59.5	4.5	4.6	4.9	5.0	7.0	7.1	7.6	7.7
60.0	4.6	4.7	5.0	5.1	7.1	7.2	7.8	7.9
60.5	4.7	4.8	5.1	5.2	7.3	7.4	8.0	8.1
61.0	4.8	4.9	5.2	5.3	7.4	7.5	8.1	8.2
61.5	4.9	5.0	5.3	5.4	7.6	7.7	8.3	8.4
62.0	5.0	5.1	5.5	5.6	7.7	7.8	8.5	8.6
62.5	5.1	5.2	5.6	5.7	7.9	8.0	8.6	8.7
63.0	5.2	5.3	5.7	5.8	8.0	8.1	8.8	8.9
63.5	5.3	5.4	5.8	5.9	8.2	8.3	8.9	9.0
64.0	5.4	5.5	5.9	6.0	8.3	8.4	9.1	9.2
64.5	5.5	5.6	6.0	6.1	8.5	8.6	9.3	9.4
65.0	5.6	5.7	6.1	6.2	8.6	8.7	9.4	9.5
65.5	5.7	5.8	6.2	6.3	8.7	8.8	9.6	9.7
66.0	5.8	5.9	6.3	6.4	8.9	9.0	9.7	9.8
66.5	5.9	6.0	6.4	6.5	9.0	9.1	9.9	10.0
67.0	6.0	6.1	6.5	6.6	9.2	9.3	10.0	10.1
67.5	6.1	6.2	6.6	6.7	9.3	9.4	10.2	10.3
68.0	6.2	6.3	6.7	6.8	9.4	9.5	10.3	10.4
68.5	6.3	6.4	6.8	6.9	9.6	9.7	10.5	10.6
69.0	6.4	6.5	6.9	7.0	9.7	9.8	10.6	10.7
69.5	6.5	6.6	7.0	7.1	9.8	9.9	10.8	10.9
70.0	6.5	6.6	7.1	7.2	10.0	10.1	10.9	11.0
70.5	6.6	6.7	7.2	7.3	10.1	10.2	11.1	11.2
71.0	6.7	6.8	7.3	7.4	10.2	10.3	11.2	11.3
71.5	6.8	6.9	7.4	7.5	10.4	10.5	11.3	11.4
72.0	6.9	7.0	7.5	7.6	10.5	10.6	11.5	11.6
72.5	7.0	7.1	7.5	7.6	10.6	10.7	11.6	11.7
73.0	7.1	7.2	7.6	7.7	10.8	10.9	11.8	11.9
73.5	7.1	7.2	7.7	7.8	10.9	11.0	11.9	12.0
74.0	7.2	7.3	7.8	7.9	11.0	11.1	12.1	12.2
74.5	7.3	7.4	7.9	8.0	11.2	11.3	12.2	12.3
75.0	7.4	7.5	8.0	8.1	11.3	11.4	12.3	12.4
75.5	7.5	7.6	8.1	8.2	11.4	11.5	12.5	12.6
76.0	7.5	7.6	8.2	8.3	11.5	11.6	12.6	12.7
76.5	7.6	7.7	8.2	8.3	11.6	11.7	12.7	12.8
77.0	7.7	7.8	8.3	8.4	11.7	11.8	12.8	12.9
77.5	7.8	7.9	8.4	8.5	11.9	12.0	13.0	13.1

1/ Based on the WHO Child Growth Standards, Methods and Development, 2006
2/ This table is also downloadable at: url.www.nnc.gov.ph



Prepared by:
NATIONAL NUTRITION COUNCIL, DOH
2332 China-Roxas Avenue Extension
Western Bicutan, Taguig City
Tel. No.: (02) 846-4459 or (02) 845-5824
email address: nourveillance@nnc.gov.ph or
nnn@yahoo.com

CHILD GROWTH STANDARDS TABLE^{1/2/}
Weight (kg) for Length (cm) of Girls 0-23 Months



INSTRUCTIONS FOR USE

Upon taking the child's length, round off the actual reading to the nearest 0.5 cm. For instance, for a child 51.3 cm. in length, refer to row 51.5 cm. or if a child's length is 58.3 cm, refer to row 58.5 cm. Depending under which column the weight of the child falls, classify the child as severely wasted, wasted, normal, overweight or obese.

Length (cm)	Severely Wasted	Weight (kg)								Length (cm)	Severely Wasted	Weight (kg)								Obese
		Wasted		Normal		Overweight		Obese	Wasted			Normal		Overweight		Obese				
		From -3SD	To -2SD	From -2SD	To +2SD	From +2SD	To +3SD		From -3SD			To -2SD	From -2SD	To +2SD	From +2SD		To +3SD			
45.0	1.8	1.9	2.0	2.1	3.0	3.1	3.3	3.4	78.0	7.4	7.5	8.1	8.2	11.7	11.8	12.9	13.0			
45.5	1.9	2.0	2.0	2.1	3.1	3.2	3.4	3.5	78.5	7.5	7.6	8.1	8.2	11.8	11.9	13.0	13.1			
46.0	1.9	2.0	2.1	2.2	3.2	3.3	3.5	3.6	79.0	7.6	7.7	8.2	8.3	11.9	12.0	13.1	13.2			
46.5	2.0	2.1	2.2	2.3	3.3	3.4	3.6	3.7	79.5	7.6	7.7	8.3	8.4	12.0	12.1	13.3	13.4			
47.0	2.1	2.2	2.3	2.4	3.4	3.5	3.7	3.8	80.0	7.7	7.8	8.4	8.5	12.1	12.2	13.4	13.5			
47.5	2.1	2.2	2.3	2.4	3.5	3.6	3.8	3.9	80.5	7.8	7.9	8.5	8.6	12.3	12.4	13.5	13.6			
48.0	2.2	2.3	2.4	2.5	3.6	3.7	4.0	4.1	81.0	7.9	8.0	8.6	8.7	12.4	12.5	13.7	13.8			
48.5	2.3	2.4	2.5	2.6	3.7	3.8	4.1	4.2	81.5	8.0	8.1	8.7	8.8	12.5	12.6	13.8	13.9			
49.0	2.3	2.4	2.5	2.6	3.8	3.9	4.2	4.3	82.0	8.0	8.1	8.7	8.8	12.6	12.7	13.9	14.0			
49.5	2.4	2.5	2.6	2.7	3.9	4.0	4.3	4.4	82.5	8.1	8.2	8.8	8.9	12.8	12.9	14.1	14.2			
50.0	2.5	2.6	2.7	2.8	4.0	4.1	4.5	4.6	83.0	8.2	8.3	8.9	9.0	12.9	13.0	14.2	14.3			
50.5	2.6	2.7	2.8	2.9	4.2	4.3	4.6	4.7	83.5	8.3	8.4	9.0	9.1	13.1	13.2	14.4	14.5			
51.0	2.7	2.8	2.9	3.0	4.3	4.4	4.8	4.9	84.0	8.4	8.5	9.1	9.2	13.2	13.3	14.5	14.6			
51.5	2.7	2.8	3.0	3.1	4.4	4.5	4.9	5.0	84.5	8.5	8.6	9.2	9.3	13.3	13.4	14.7	14.8			
52.0	2.8	2.9	3.1	3.2	4.6	4.7	5.1	5.2	85.0	8.6	8.7	9.3	9.4	13.5	13.6	14.9	15.0			
52.5	2.9	3.0	3.2	3.3	4.7	4.8	5.2	5.3	85.5	8.7	8.8	9.4	9.5	13.6	13.7	15.0	15.1			
53.0	3.0	3.1	3.3	3.4	4.9	5.0	5.4	5.5	86.0	8.8	8.9	9.6	9.7	13.8	13.9	15.2	15.3			
53.5	3.1	3.2	3.4	3.5	5.0	5.1	5.5	5.6	86.5	8.9	9.0	9.7	9.8	13.9	14.0	15.4	15.5			
54.0	3.2	3.3	3.5	3.6	5.2	5.3	5.7	5.8	87.0	9.0	9.1	9.8	9.9	14.1	14.2	15.5	15.6			
54.5	3.3	3.4	3.6	3.7	5.3	5.4	5.9	6.0	87.5	9.1	9.2	9.9	10.0	14.2	14.3	15.7	15.8			
55.0	3.4	3.5	3.7	3.8	5.5	5.6	6.1	6.2	88.0	9.2	9.3	10.0	10.1	14.4	14.5	15.9	16.0			
55.5	3.5	3.6	3.8	3.9	5.7	5.8	6.3	6.4	88.5	9.3	9.4	10.1	10.2	14.5	14.6	16.0	16.1			
56.0	3.6	3.7	3.9	4.0	5.8	5.9	6.4	6.5	89.0	9.4	9.5	10.2	10.3	14.7	14.8	16.2	16.3			
56.5	3.7	3.8	4.0	4.1	6.0	6.1	6.6	6.7	89.5	9.5	9.6	10.3	10.4	14.8	14.9	16.4	16.5			
57.0	3.8	3.9	4.2	4.3	6.1	6.2	6.8	6.9	90.0	9.6	9.7	10.4	10.5	15.0	15.1	16.5	16.6			
57.5	3.9	4.0	4.3	4.4	6.3	6.4	7.0	7.1	90.5	9.7	9.8	10.5	10.6	15.1	15.2	16.7	16.8			
58.0	4.0	4.1	4.4	4.5	6.5	6.6	7.1	7.2	91.0	9.8	9.9	10.6	10.7	15.3	15.4	16.9	17.0			
58.5	4.1	4.2	4.5	4.6	6.6	6.7	7.3	7.4	91.5	9.9	10.0	10.7	10.8	15.5	15.6	17.0	17.1			
59.0	4.2	4.3	4.6	4.7	6.8	6.9	7.5	7.6	92.0	10.0	10.1	10.8	10.9	15.6	15.7	17.2	17.3			
59.5	4.3	4.4	4.7	4.8	6.9	7.0	7.7	7.8	92.5	10.0	10.1	10.9	11.0	15.8	15.9	17.4	17.5			
60.0	4.4	4.5	4.8	4.9	7.1	7.2	7.8	7.9	93.0	10.1	10.2	11.0	11.1	15.9	16.0	17.5	17.6			
60.5	4.5	4.6	4.9	5.0	7.3	7.4	8.0	8.1	93.5	10.2	10.3	11.1	11.2	16.1	16.2	17.7	17.8			
61.0	4.6	4.7	5.0	5.1	7.4	7.5	8.2	8.3	94.0	10.3	10.4	11.2	11.3	16.2	16.3	17.9	18.0			
61.5	4.7	4.8	5.1	5.2	7.6	7.7	8.4	8.5	94.5	10.4	10.5	11.3	11.4	16.4	16.5	18.0	18.1			
62.0	4.8	4.9	5.2	5.3	7.7	7.8	8.5	8.6	95.0	10.5	10.6	11.4	11.5	16.5	16.6	18.2	18.3			
62.5	4.9	5.0	5.3	5.4	7.8	7.9	8.7	8.8	95.5	10.6	10.7	11.5	11.6	16.7	16.8	18.4	18.5			
63.0	5.0	5.1	5.4	5.5	8.0	8.1	8.8	8.9	96.0	10.7	10.8	11.6	11.7	16.8	16.9	18.6	18.7			
63.5	5.1	5.2	5.5	5.6	8.1	8.2	9.0	9.1	96.5	10.8	10.9	11.7	11.8	17.0	17.1	18.7	18.8			
64.0	5.2	5.3	5.6	5.7	8.3	8.4	9.1	9.2	97.0	10.9	11.0	11.9	12.0	17.1	17.2	18.9	19.0			
64.5	5.3	5.4	5.7	5.8	8.4	8.5	9.3	9.4	97.5	11.0	11.1	12.0	12.1	17.3	17.4	19.1	19.2			
65.0	5.4	5.5	5.8	5.9	8.6	8.7	9.5	9.6	98.0	11.1	11.2	12.1	12.2	17.5	17.6	19.3	19.4			
65.5	5.4	5.5	5.9	6.0	8.7	8.8	9.6	9.7	98.5	11.2	11.3	12.2	12.3	17.6	17.7	19.5	19.6			
66.0	5.5	5.6	6.0	6.1	8.8	8.9	9.8	9.9	99.0	11.3	11.4	12.3	12.4	17.8	17.9	19.6	19.7			
66.5	5.6	5.7	6.1	6.2	9.0	9.1	9.9	10.0	99.5	11.4	11.5	12.4	12.5	18.0	18.1	19.8	19.9			
67.0	5.7	5.8	6.2	6.3	9.1	9.2	10.0	10.1	100.0	11.5	11.6	12.5	12.6	18.1	18.2	20.0	20.1			
67.5	5.8	5.9	6.3	6.4	9.2	9.3	10.2	10.3	100.5	11.6	11.7	12.6	12.7	18.3	18.4	20.2	20.3			
68.0	5.9	6.0	6.4	6.5	9.4	9.5	10.3	10.4	101.0	11.7	11.8	12.7	12.8	18.5	18.6	20.4	20.5			
68.5	6.0	6.1	6.5	6.6	9.5	9.6	10.5	10.6	101.5	11.8	11.9	12.9	13.0	18.7	18.8	20.6	20.7			
69.0	6.0	6.1	6.6	6.7	9.6	9.7	10.6	10.7	102.0	11.9	12.0	13.0	13.1	18.9	19.0	20.8	20.9			
69.5	6.1	6.2	6.7	6.8	9.7	9.8	10.7	10.8	102.5	12.0	12.1	13.1	13.2	19.0	19.1	21.0	21.1			
70.0	6.2	6.3	6.8	6.9	9.9	10.0	10.9	11.0	103.0	12.2	12.3	13.2	13.3	19.2	19.3	21.3	21.4			
70.5	6.3	6.4	6.8	6.9	10.0	10.1	11.0	11.1	103.5	12.3	12.4	13.4	13.5	19.4	19.5	21.5	21.6			
71.0	6.4	6.5	6.9	7.0	10.1	10.2	11.1	11.2	104.0	12.4	12.5	13.5	13.6	19.6	19.7	21.7	21.8			
71.5	6.4	6.5	7.0	7.1	10.2	10.3	11.3	11.4	104.5	12.5	12.6	13.6	13.7	19.8	19.9	21.9	22.0			
72.0	6.5	6.6	7.1	7.2	10.3	10.4	11.4	11.5	105.0	12.6	12.7	13.7	13.8	20.0	20.1	22.2	22.3			
72.5	6.6	6.7	7.2	7.3	10.5	10.6	11.5	11.6	105.5	12.7	12.8	13.9	14.0	20.2	20.3	22.4	22.5			
73.0	6.7	6.8	7.3	7.4	10.6	10.7	11.7	11.8	106.0	12.9	13.0	14.0	14.1	20.5	20.6	22.6	22.7			
73.5	6.8	6.9	7.3	7.4	10.7	10.8	11.8	11.9	106.5	13.0	13.1	14.2	14.3	20.7	20.8	22.9	23.0			
74.0	6.8	6.9	7.4	7.5	10.8	10.9	11.9	12.0	107.0	13.1	13.2	14.3	14.4	20.9	21.0	23.1	23.2			
74.5	6.9	7.0	7.5	7.6	10.9	11.0	12.0	12.1	107.5	13.2	13.3	14.4	14.5	21.1	21.2	23.4	23.5			
75.0	7.0	7.1	7.6	7.7	11.0	11.1	12.2	12.3	108.0	13.4	13.5	14.6	14.7	21.3	21.4	23.6	23.7			
75.5	7.0	7.1	7.7	7.8	11.1	11.2	12.3	12.4	108.5	13.5	13.6	14.7	14.8	21.6	21.7	23.9	24.0			
76.0	7.1	7.2	7.7	7.8	11.2	11.3	12.4	12.5	109.0	13.6	13.7	14.9	15.0	21.8	21.9	24.2	24.3			
76.5	7.2	7.3	7.8	7.9	11.4	11.5	12.5	12.6	109.5	13.8	13.9	15.0	15.1	22.0	22.1	24.4	24.5			
77.0	7.3	7.4	7.9	8.0	11.5	11.6	12.6	12.7	110.0	13.9	14.0	15.2	15.3	22.3	22.4	24.7	24.8			
77.5	7.3	7.4	8.0	8.1	11.6	11.7	12.8	12.9												

1/ Based on the WHO Child Growth Standards, Methods and Development, 2006

2/ This table is also downloadable at: url:www.nnc.gov.ph



Prepared by:
NATIONAL NUTRITION COUNCIL, DOH
2332 Chino Roces Avenue Extension
Western Bicutan, Taguig City
Tel No.: (02) 846-4439 or (02) 843-5824
email address: nourveillance@nnc.gov.ph or
nsd_nnc@yahoo.com

CHILD GROWTH STANDARDS TABLE ^{1,2}
Weight (kg) for Height (cm) of Boys 24-60 months old

www.ncc.gov.ph

Upon taking the child's height, round off the actual reading to the nearest 0.5 cm. For instance, for a child 91.3 cm. in height, refer to row 91.5 cm. or if a child's height is 98.3 cm, refer to row 98.5 cm. Depending under which column the weight of the child falls, classify the child as severely wasted, wasted, normal, overweight or obese.


Height (cm)	Weight (kg)							
	Severely Wasted	Wasted		Normal		Overweight		Obese
	< -3SD	-3SD	-2SD	-2SD	+2SD	+3SD	> +3SD	
85.0	5.8	5.9	6.2	6.3	6.8	6.9	7.6	9.7
85.5	5.9	6.0	6.3	6.4	6.9	7.0	7.8	9.9
86.0	6.0	6.1	6.4	6.5	7.1	7.2	8.0	10.0
86.5	6.0	6.1	6.5	6.6	7.2	7.3	8.1	10.2
87.0	6.1	6.2	6.6	6.7	7.4	7.5	8.3	10.3
87.5	6.2	6.3	6.7	6.8	7.5	7.6	8.4	10.5
88.0	6.3	6.4	6.8	6.9	7.6	7.7	8.5	10.6
88.5	6.4	6.5	6.9	7.0	7.8	7.9	8.6	10.8
89.0	6.5	6.6	7.0	7.1	7.9	8.0	8.8	10.9
89.5	6.6	6.7	7.1	7.2	8.0	8.1	8.9	11.1
90.0	6.7	6.8	7.2	7.3	8.2	8.3	9.0	11.2
90.5	6.8	6.9	7.3	7.4	8.3	8.4	9.1	11.4
91.0	6.8	6.9	7.4	7.5	8.4	8.5	9.2	11.5
91.5	6.9	7.0	7.5	7.6	8.5	8.6	9.3	11.7
92.0	7.0	7.1	7.6	7.7	8.6	8.7	9.4	11.8
92.5	7.1	7.2	7.7	7.8	8.7	8.8	9.5	11.9
93.0	7.2	7.3	7.8	7.9	8.8	8.9	9.6	12.1
93.5	7.3	7.4	7.9	8.0	8.9	9.0	9.7	12.2
94.0	7.3	7.4	7.9	8.0	9.0	9.1	9.8	12.3
94.5	7.4	7.5	8.0	8.1	9.1	9.2	9.9	12.5
95.0	7.5	7.6	8.1	8.2	9.2	9.3	10.0	12.6
95.5	7.6	7.7	8.2	8.3	9.3	9.4	10.1	12.7
96.0	7.6	7.7	8.3	8.4	9.4	9.5	10.2	12.9
96.5	7.7	7.8	8.4	8.5	9.5	9.6	10.3	13.0
97.0	7.8	7.9	8.4	8.5	9.6	9.7	10.4	13.1
97.5	7.9	8.0	8.5	8.6	9.7	9.8	10.5	13.2
98.0	7.9	8.0	8.6	8.7	9.8	9.9	10.6	13.4
98.5	8.0	8.1	8.7	8.8	9.9	10.0	10.7	13.5
99.0	8.1	8.2	8.7	8.8	10.0	10.1	10.8	13.6
99.5	8.2	8.3	8.8	8.9	10.1	10.2	10.9	13.7
100.0	8.2	8.3	8.9	9.0	10.2	10.3	11.0	13.8
100.5	8.3	8.4	9.0	9.1	10.3	10.4	11.1	13.9
101.0	8.4	8.5	9.1	9.2	10.4	10.5	11.2	14.1
101.5	8.5	8.6	9.2	9.3	10.5	10.6	11.3	14.2
102.0	8.6	8.7	9.3	9.4	10.6	10.7	11.4	14.3
102.5	8.6	8.7	9.4	9.5	10.7	10.8	11.5	14.5
103.0	8.7	8.8	9.5	9.6	10.8	10.9	11.6	14.6
103.5	8.8	8.9	9.6	9.7	10.9	11.0	11.7	14.7
104.0	8.9	9.0	9.7	9.8	11.0	11.1	11.8	14.9
104.5	9.0	9.1	9.8	9.9	11.1	11.2	11.9	15.0
105.0	9.1	9.2	9.9	10.0	11.2	11.3	12.0	15.2
105.5	9.2	9.3	10.0	10.1	11.3	11.4	12.1	15.3
106.0	9.3	9.4	10.1	10.2	11.4	11.5	12.2	15.5
106.5	9.4	9.5	10.2	10.3	11.5	11.6	12.3	15.6
107.0	9.5	9.6	10.3	10.4	11.6	11.7	12.4	15.8
107.5	9.6	9.7	10.4	10.5	11.7	11.8	12.5	15.9
108.0	9.7	9.8	10.5	10.6	11.8	11.9	12.6	16.1
108.5	9.8	9.9	10.6	10.7	11.9	12.0	12.7	16.2
109.0	9.9	10.0	10.7	10.8	12.0	12.1	12.8	16.4
109.5	10.0	10.1	10.8	10.9	12.1	12.2	12.9	16.5
110.0	10.1	10.2	10.9	11.0	12.2	12.3	13.0	16.7
110.5	10.2	10.3	11.0	11.1	12.3	12.4	13.1	16.8
111.0	10.3	10.4	11.1	11.2	12.4	12.5	13.2	17.0
111.5	10.4	10.5	11.2	11.3	12.5	12.6	13.3	17.1
112.0	10.5	10.6	11.3	11.4	12.6	12.7	13.4	17.3
112.5	10.6	10.7	11.4	11.5	12.7	12.8	13.5	17.4
113.0	10.7	10.8	11.5	11.6	12.8	12.9	13.6	17.6
113.5	10.8	10.9	11.6	11.7	12.9	13.0	13.7	17.7
114.0	10.9	11.0	11.7	11.8	13.0	13.1	13.8	17.9
114.5	11.0	11.1	11.8	11.9	13.1	13.2	13.9	18.0
115.0	11.1	11.2	11.9	12.0	13.2	13.3	14.0	18.2
115.5	11.2	11.3	12.0	12.1	13.3	13.4	14.1	18.3
116.0	11.3	11.4	12.1	12.2	13.4	13.5	14.2	18.5
116.5	11.4	11.5	12.2	12.3	13.5	13.6	14.3	18.6
117.0	11.5	11.6	12.3	12.4	13.6	13.7	14.4	18.8
117.5	11.6	11.7	12.4	12.5	13.7	13.8	14.5	18.9
118.0	11.7	11.8	12.5	12.6	13.8	13.9	14.6	19.1
118.5	11.8	11.9	12.6	12.7	13.9	14.0	14.7	19.2
119.0	11.9	12.0	12.7	12.8	14.0	14.1	14.8	19.4
119.5	12.0	12.1	12.8	12.9	14.1	14.2	14.9	19.5
120.0	12.1	12.2	12.9	13.0	14.2	14.3	15.0	19.7

¹ Based on the WHO Child Growth Standards: Methods and Development, 2006
² This table is also downloadable at www.ncc.gov.ph

Prepared by:
 NATIONAL NUTRITION FOUNDATION, INC.
 2002 Orlan Avenue, Alabang Extension
 Muntinlupa City, Metro Manila
 Tel./Fax: (02) 886-6888 or (02) 886-6824
 e-mail: info@ncc.gov.ph
web_page@ncc.gov.ph

CHILD GROWTH STANDARDS TABLE ^{1,2}

Weight (kg) for Height (cm) of Girls 24-60 months old



INSTRUCTIONS FOR USE

Upon taking the child's height, round off the actual reading to the nearest 0.5 cm. For instance, for a child 91.3 cm in height, refer to row 91.5 cm, or if a child's height is 98.3 cm, refer to row 98.5 cm. Depending under which column the weight of the child falls, classify the child as severely wasted, wasted, normal, overweight or obese.

Height (cm)	Weight (kg)									
	Severely Wasted	Wasted		Normal		Overweight		Obese		
	< -3SD	-3SD	-2SD	-2SD	-1SD	-1SD	+1SD	+2SD	> +3SD	
85.0	5.5	5.6	6.0	6.1	6.7	6.8	6.7	9.8		
85.5	5.6	5.7	6.1	6.2	6.9	9.0	9.8	9.9		
86.0	5.7	5.8	6.2	6.3	9.0	9.1	10.0	10.1		
86.5	5.7	5.8	6.3	6.4	9.1	9.2	10.1	10.2		
87.0	5.8	5.9	6.3	6.4	9.3	9.4	10.2	10.3		
87.5	5.9	6.0	6.4	6.5	9.4	9.5	10.4	10.5		
88.0	6.0	6.1	6.5	6.6	9.5	9.6	10.5	10.6		
88.5	6.1	6.2	6.6	6.7	9.7	9.8	10.7	10.8		
89.0	6.2	6.3	6.7	6.8	9.8	9.9	10.8	10.9		
89.5	6.2	6.3	6.8	6.9	9.9	10.0	10.9	11.0		
90.0	6.3	6.4	6.9	7.0	10.0	10.1	11.1	11.2		
90.5	6.4	6.5	7.0	7.1	10.1	10.2	11.2	11.3		
91.0	6.5	6.6	7.0	7.1	10.3	10.4	11.3	11.4		
91.5	6.6	6.7	7.1	7.2	10.4	10.5	11.5	11.6		
92.0	6.6	6.7	7.2	7.3	10.5	10.6	11.6	11.7		
92.5	6.7	6.8	7.3	7.4	10.6	10.7	11.7	11.8		
93.0	6.8	6.9	7.4	7.5	10.7	10.8	11.8	11.9		
93.5	6.9	7.0	7.5	7.6	10.8	10.9	12.0	12.1		
94.0	6.9	7.0	7.5	7.6	11.0	11.1	12.1	12.2		
94.5	7.0	7.1	7.6	7.7	11.1	11.2	12.2	12.3		
95.0	7.1	7.2	7.7	7.8	11.2	11.3	12.3	12.4		
95.5	7.1	7.2	7.8	7.9	11.3	11.4	12.5	12.6		
96.0	7.2	7.3	7.9	8.0	11.4	11.5	12.6	12.7		
96.5	7.3	7.4	7.9	8.0	11.5	11.6	12.7	12.8		
97.0	7.4	7.5	8.0	8.1	11.6	11.7	12.8	12.9		
97.5	7.4	7.5	8.1	8.2	11.7	11.8	12.9	13.0		
98.0	7.5	7.6	8.2	8.3	11.8	11.9	13.1	13.2		
98.5	7.6	7.7	8.3	8.4	12.0	12.1	13.2	13.3		
99.0	7.7	7.8	8.3	8.4	12.1	12.2	13.3	13.4		
99.5	7.7	7.8	8.4	8.5	12.2	12.3	13.4	13.5		
100.0	7.8	7.9	8.5	8.6	12.3	12.4	13.5	13.6		
100.5	7.9	8.0	8.5	8.6	12.3	12.4	13.6	13.7		
101.0	8.0	8.1	8.6	8.7	12.4	12.5	13.7	13.8		
101.5	8.0	8.1	8.6	8.7	12.4	12.5	13.7	13.8		
102.0	8.1	8.2	8.7	8.8	12.5	12.6	13.8	13.9		
102.5	8.2	8.3	8.8	8.9	12.6	12.7	13.9	14.0		
103.0	8.3	8.4	8.9	9.0	12.7	12.8	14.0	14.1		
103.5	8.3	8.4	9.0	9.1	12.8	12.9	14.1	14.2		
104.0	8.4	8.5	9.1	9.2	12.9	13.0	14.2	14.3		
104.5	8.5	8.6	9.2	9.3	13.0	13.1	14.3	14.4		
105.0	8.6	8.7	9.3	9.4	13.1	13.2	14.4	14.5		
105.5	8.6	8.7	9.3	9.4	13.1	13.2	14.4	14.5		
106.0	8.7	8.8	9.4	9.5	13.2	13.3	14.5	14.6		
106.5	8.8	8.9	9.5	9.6	13.3	13.4	14.6	14.7		
107.0	8.9	9.0	9.6	9.7	13.4	13.5	14.7	14.8		
107.5	8.9	9.0	9.6	9.7	13.4	13.5	14.7	14.8		
108.0	9.0	9.1	9.7	9.8	13.5	13.6	14.8	14.9		
108.5	9.1	9.2	9.8	9.9	13.6	13.7	14.9	15.0		
109.0	9.2	9.3	9.9	10.0	13.7	13.8	15.0	15.1		
109.5	9.2	9.3	9.9	10.0	13.7	13.8	15.0	15.1		
110.0	9.3	9.4	10.0	10.1	13.8	13.9	15.1	15.2		
110.5	9.4	9.5	10.1	10.2	13.9	14.0	15.2	15.3		
111.0	9.5	9.6	10.2	10.3	14.0	14.1	15.3	15.4		
111.5	9.5	9.6	10.2	10.3	14.0	14.1	15.3	15.4		
112.0	9.6	9.7	10.3	10.4	14.1	14.2	15.4	15.5		
112.5	9.7	9.8	10.4	10.5	14.2	14.3	15.5	15.6		
113.0	9.8	9.9	10.5	10.6	14.3	14.4	15.6	15.7		
113.5	9.8	9.9	10.5	10.6	14.3	14.4	15.6	15.7		
114.0	9.9	10.0	10.6	10.7	14.4	14.5	15.7	15.8		
114.5	10.0	10.1	10.7	10.8	14.5	14.6	15.8	15.9		
115.0	10.1	10.2	10.8	10.9	14.6	14.7	15.9	16.0		
115.5	10.1	10.2	10.8	10.9	14.6	14.7	15.9	16.0		
116.0	10.2	10.3	10.9	11.0	14.7	14.8	16.0	16.1		
116.5	10.3	10.4	11.0	11.1	14.8	14.9	16.1	16.2		
117.0	10.4	10.5	11.1	11.2	14.9	15.0	16.2	16.3		
117.5	10.5	10.6	11.2	11.3	15.0	15.1	16.3	16.4		
118.0	10.6	10.7	11.3	11.4	15.1	15.2	16.4	16.5		
118.5	10.6	10.7	11.3	11.4	15.1	15.2	16.4	16.5		
119.0	10.7	10.8	11.4	11.5	15.2	15.3	16.5	16.6		
119.5	10.7	10.8	11.4	11.5	15.2	15.3	16.5	16.6		
120.0	10.8	10.9	11.5	11.6	15.3	15.4	16.6	16.7		
120.5	10.9	11.0	11.6	11.7	15.4	15.5	16.7	16.8		

¹ Based on the WHO Child Growth Standards: Methods and Development, 2006

² This table is also downloadable at: www.nmc.gov.ph



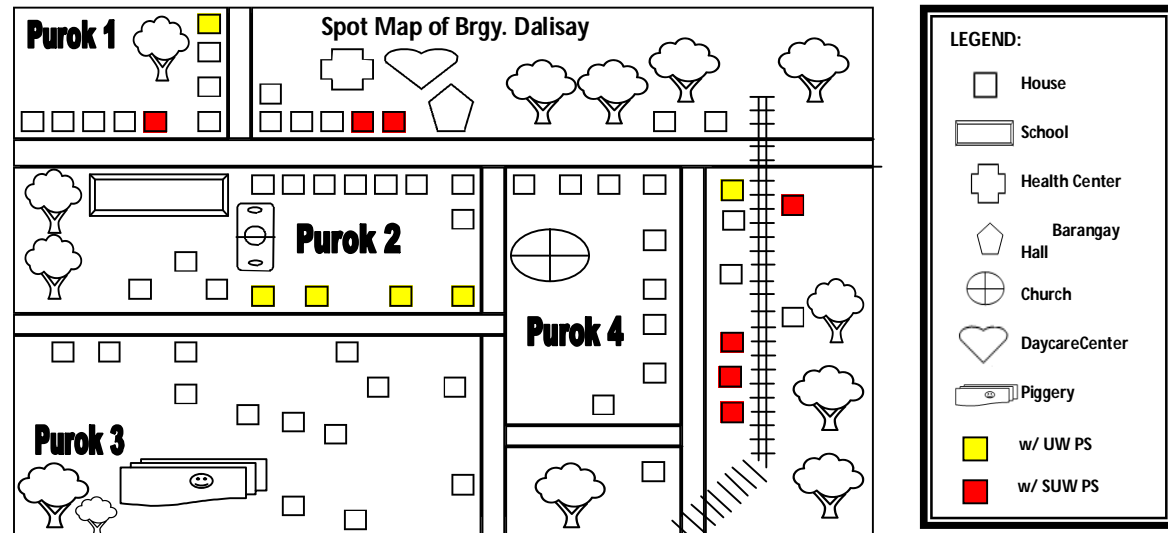
Prepared by:
NATIONAL NUTRITION COUNCIL, DOH
2002 Chino Roces Avenue Extension
Western Division, Taguig City
Tel./Fax: (02) 846-6039 or (02) 846-6034
e-mail address: nourishment@nmc.gov.ph or
nnc_und@nmc.gov.ph

How to Make a Spot Map

- Step 1. Start the activity by explaining that the spot map is an important tool in program planning, monitoring, evaluation and assessment
- Step 2. Continue by defining that a spot map is”
- a. An aerial view of the barangay, where the important characteristics of the barangay are indicated
 - b. A graphical presentation of the current nutrition situation of a barangay
- Step 3. Enumerate and discuss the steps in preparing a spot map, as follows:
- a. Use the available map of the barangay
 - b. Make sure of that materials are available including illustration board or plywood, paint, cartolina, permanent markers, map pins, plastic cover, paste or tape, scissors, paint brush and ruler.
 - c. Write the names of neighboring barangays.
 - d. Draw on the map the existing structures such as school, church, health center, barangay hall, day care center/s, water pump, water tank, houses, toilets, water system, basketball court, creek/canal/drainage, water line, electric line, pathway, cemented/rough road, business establishments, fishpond, poultry, piggery, rest house, resort, small market and other markers.
 - e. For the houses drawn on the map, show/mark the following information by using color codes/legends.

Yellow-	with “underweight/stunted/wasted” children
Red	- with “severely underweight/severely stunted/severely wasted” children
Green	- with “normal weight/length/height” children
Orange-	with “overweight” children
Pink	- with pregnant woman
Violet	- with lactating woman
Brown	- with infants
Blue	- have large family size (households with greater than 5 members)
Gray	- without sanitary toilets
- Step 4. Once completed, present the spot map to the BNC when presenting the OPT Plus data to help the BNC visualize the location and characteristics of families with underweight children

Step 5. Once completed, post the spot map at the barangay center, barangay hall, or any place commonly frequented by the community.



Source : IHNF-CHE-UPLB. Adopted from the Trainer's Manual on Basic Course for Barangay Nutrition Scholar. 2011

Proven Interventions for Preventing and Managing Wasting and Stunting

Immediate management of acute malnutrition (wasting) should be done to reduce risks to infections and prevent further deterioration of the nutritional status of the child. The WHO has existing protocols on the management of moderate and severe acute malnutrition which the Philippines are adapting which may be done home-based or moderate cases and hospital-based for severe cases, which may use ready-to-use therapeutic food formulations. Wasted children in communities should be immediately assisted for immediate nutrition and health interventions. The adoption of the WHO SAM Protocol reduce deaths due to malnutrition and complications by 55%.

Proven interventions to reduce stunting include improving complementary feeding support through nutrition counseling, food supplements or conditional cash transfer-type for food-insecure areas and without supplementation for food-secure populations. Diarrhea also increases the risk of stunting among children by 1.04 per episode and therefore deserve actions along hygiene promotion.

Effect of nutrition-related interventions on mortality and stunting in 36 countries

	Proportional reduction in deaths before			Relative reduction in prevalence of stunting at		
	12 mos	24 mos	36 mos	12 mos	24 mos	36 mos
99% coverage with balanced energy protein supplementation	3.6 %	3.1%	2.9%	1.9%	0.5%	0.3%
99% coverage with intermittent preventive treatment	2.4%	2.1%	1.9%	1.4%	0.3%	0.1%
99% coverage with multiple micronutrient supplementation in pregnancy	2.0%	1.7%	1.6%	0.9%	0.3%	0.1%
99% coverage with breastfeeding promotion and support	11.6%	9.9%	9.1%	0%	0%	0%
99% coverage with feeding intervention (promotion of complementary feeding and other supportive strategies)	0%	1.1%	1.5%	19.8%	17.2%	15.0%
99% coverage with Vitamin A (including neonatal in Asia)	6.9%	7.1%	7.2%	0%	0%	0%
99% coverage with zinc supplementation	1.3%	2.8%	3.6%	9.1%	15.5%	17.0%
99% coverage with hygiene intervention	0%	0.1%	0.2%	1.9%	2.4%	2.4%

Source: Lancet Series on Maternal and Child Undernutrition 3

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