

DAY CARE SURVEY 2021

GRENADA FOOD & NUTRITION COUNCIL (GFNC)



FEBRUARY –MAY 2021

Grenada Food and Nutrition Council

Day Care Survey Report 2021

The 2021 Day Care Survey was conducted by various staff members at the GFNC during the months of February to May. The survey was designed to assess the nutritional status of children attending all day care centres (government/government-assisted and private) in Grenada.

GOAL

The goal of the survey was to monitor the trends in growth patterns within the target population.

INSTRUMENTS USED

A Seca height measure/length board and Seca digital flat scale were used to measure the children's height/length in centimetres and their weight in kilograms.

METHODOLOGY

Nutrition Officers visited forty-nine (49) day care centres (thirty-eight (38) private and eleven (11) government/government-assisted) during the months of February to May. Anthropometric (weight and height/length measurement) and personal identifiable data (child's name, sex, day care centre, date of birth, date of visit, and parish) were collected and documented.

The data was analyzed using WHO Anthropometric software, and the anthropometric indices; BMI-for-age (BAZ) and height-for-age (HAZ) were used to determine the nutritional status of the children.

BMI-for-age (BAZ) indicator can identify children who are wasted/thin, normal weight, overweight, or obese. Height-for-age (HAZ) reflects growth in length/ height and would identify children who are stunted (short). It should be noted that stunted can be an indication of

malnutrition.

Table 1: Key used to determine the nutritional status of children

Growth indicators

Z-score	Height-for-age	BMI-for-age
Above 3		Obese
Between 2 and 3		Overweight
Between 1 and 2		Possible risk of overweight
At -2 through to +2	Normal	Normal
Between -2 and -3	Stunted	Wasted
Below -3	Severely stunted	Severely wasted

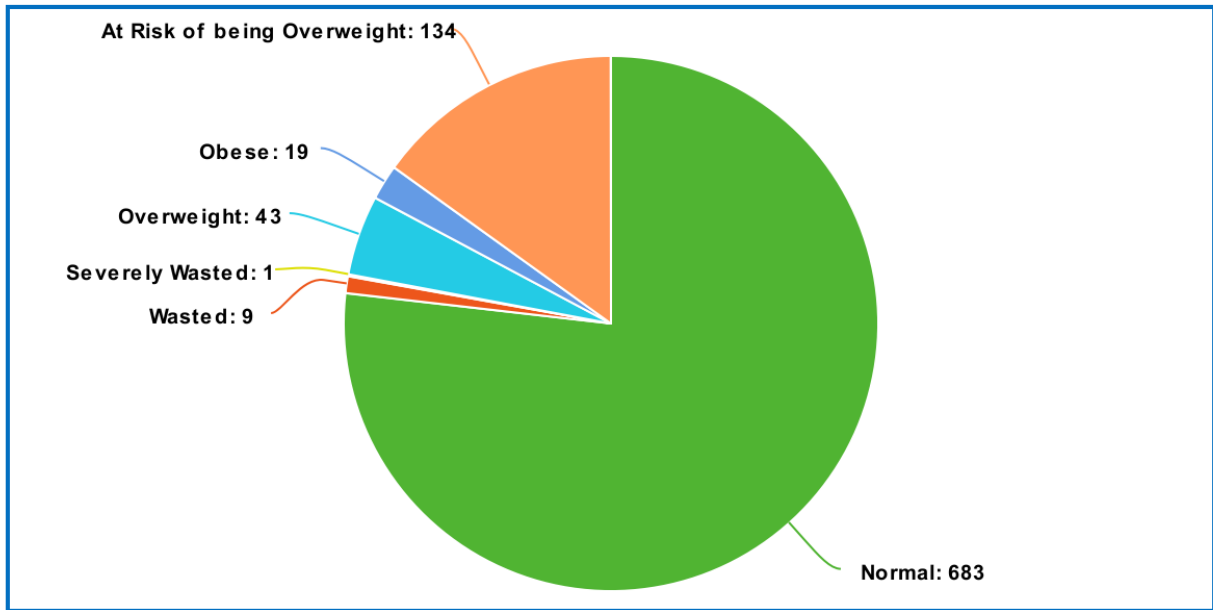
RESULTS:

A total of seven hundred and fifty-five (755) children were assessed:

- Three hundred and eighty-one (381) females.
- Three hundred and seventy four (374) males.
- Six hundred and eighty-three (683) children, approximately ninety percent (90.5%), of the children assessed had a normal BMI-for-age (BMI-for-age Z-score (BAZ) between -2 and +2).
- One hundred and thirty- four (134) or 17.7% of the children who had normal BMI for age (between +1 Z-score and +2 Z-score) are at possible risk of becoming overweight.
- Nine (9) or 1.2% of the children had BMI-for-age Z-score (BAZ) below -2 and above -3 which indicate wasted or thin. One (1) or 0.1% of the children had a BMI below -3 which indicated severely wasted.
- Sixty-two (62) or 8.2% of the children had BMI-for-age Z-score (BAZ) above +2 which indicate overweight/obese. Of these sixty-two (62), forty-three (43) or 5.7% were overweight and nineteen (19) or 2.5% was obese.
- Twenty-nine (29) or 3.8% had Height-for-age (HAZ) below -2 which indicate stunted/severely stunted.

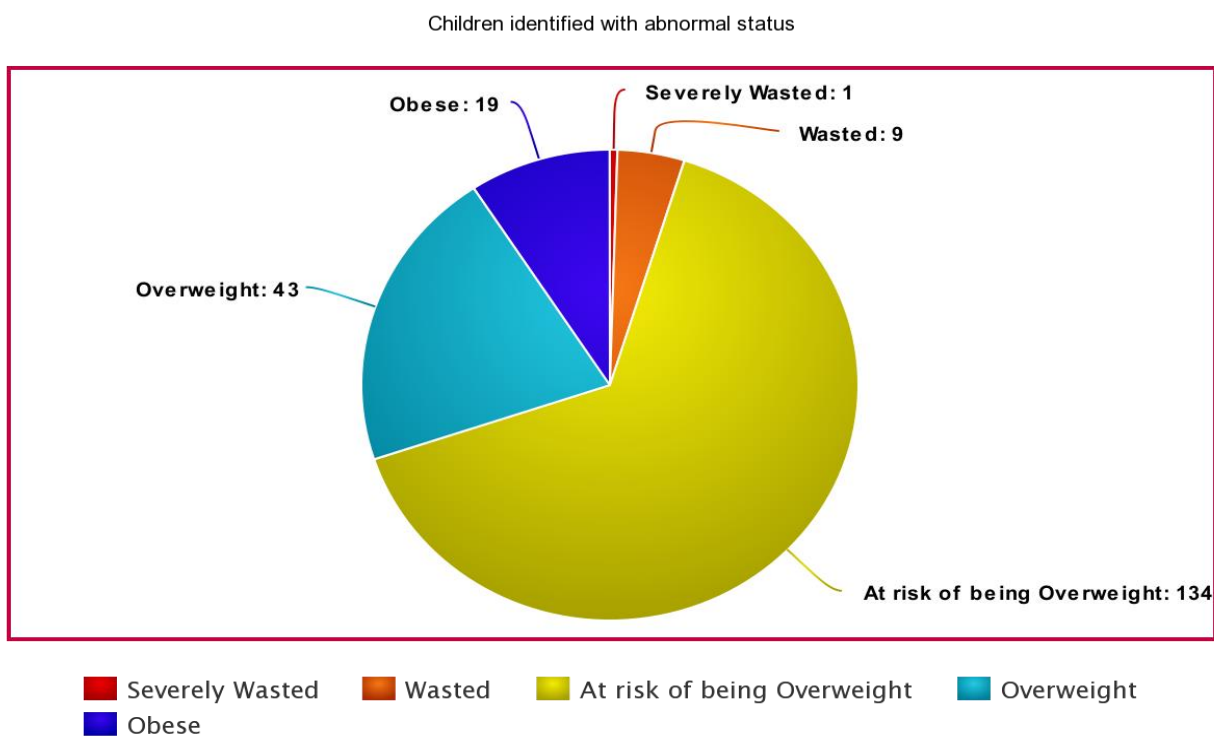
Chart 1:

Nutritional status of all the children assessed



■ Normal ■ Wasted ■ Severely Wasted ■ Overweight ■ Obese
■ At Risk of being Overweight

Chart 2:



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Table 2: A comparison of the Nutritional Status of Children over Five (5) years, Z-score (BAZ and HAZ)

		2021		2020		2019		2017 (newly enrolled only)		2016	
		No.	%	No.	%	No.	%	No.	%	No.	%
Above 3 (BAZ)	Obese	19	2.5	6	0.7	17	1.8	5	0.9	11	1.5
Between 2 and 3 (BAZ)	Overweight	43	5.7	36	4.3	45	4.7	14	2.5	10	1.4
Between 1 and 2 (BAZ)	Risk of overweight	134	17.7	136	16.3	156	16.3	38	6.9	82	11.3
At -2 through to +2 (BAZ)	Normal	683	90.5	786	94.4	725	75.7	427	78.0	594	81.7
Between -2 and -3 (BAZ)	Wasted	9	1.2	5	0.6	11	1.1	53	9.7	22	3.0
Below -3 (BAZ)	Severely wasted	1	0.1	0	0	4	0.4	11	2.0	8	1.1
Below -2 (HAZ)	Stunted	29	3.8	45	5.4	24	2.5	29	5.3	34	4.7

Table 3: Assessment by Parish

Parish	No. of Centres	No. of Children Assessed	No. Wasted (BAZ <-2)	% Wasted	No. Overweight/ Obese (BAZ >2)	% Overweight/ Obese	No. Stunted (HAZ<-2)	% Stunted
St. John	3	64	0	0	4	6.3	4	6.3
St. Mark	1	26	0	0	2	7.7	1	3.8
St. Patrick	3	34	0	0	4	11.8	0	0
St. Andrew	13	196	6	3.1	14	7.1	7	3.6
St. David	1	31	0	0	2	6.5	0	0
St. George	26	367	4	1.1	31	8.4	12	3.3
Carriacou	2	37	0	0	5	13.5	5	13.5
Total	49	755	10	1.3	62	8.2	29	3.84

Table 4: Comparison of Nutritional Status by Sex

Gender	No. Assessed	No. Wasted (BAZ <-2)	% Wasted	No. Overweight/Obese (BAZ >2)	% Overweight/Obese	No. Stunted (HAZ <-2)	% Stunted
Male	374	5	1.3	37	9.9	12	3.2
Female	381	5	1.3	25	6.6	17	4.5
Total	755	10	1.3	62	8.2	29	3.8

Chart 3:

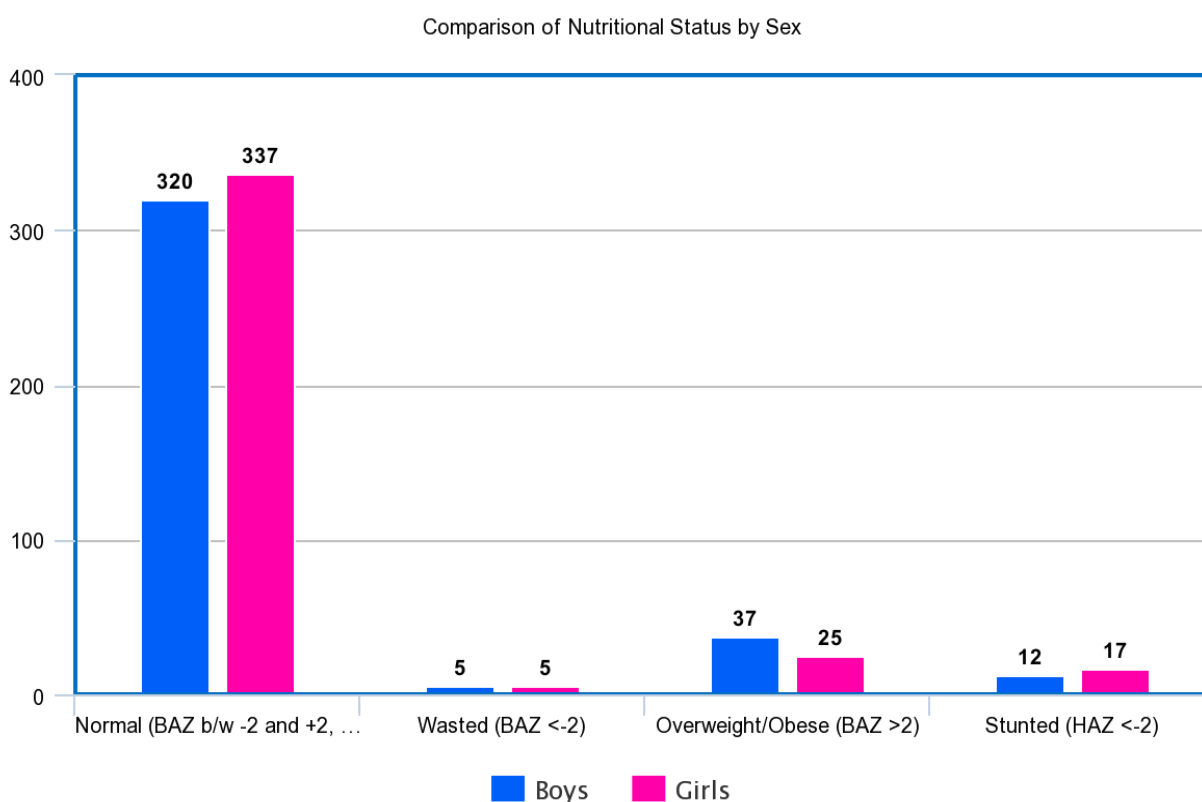
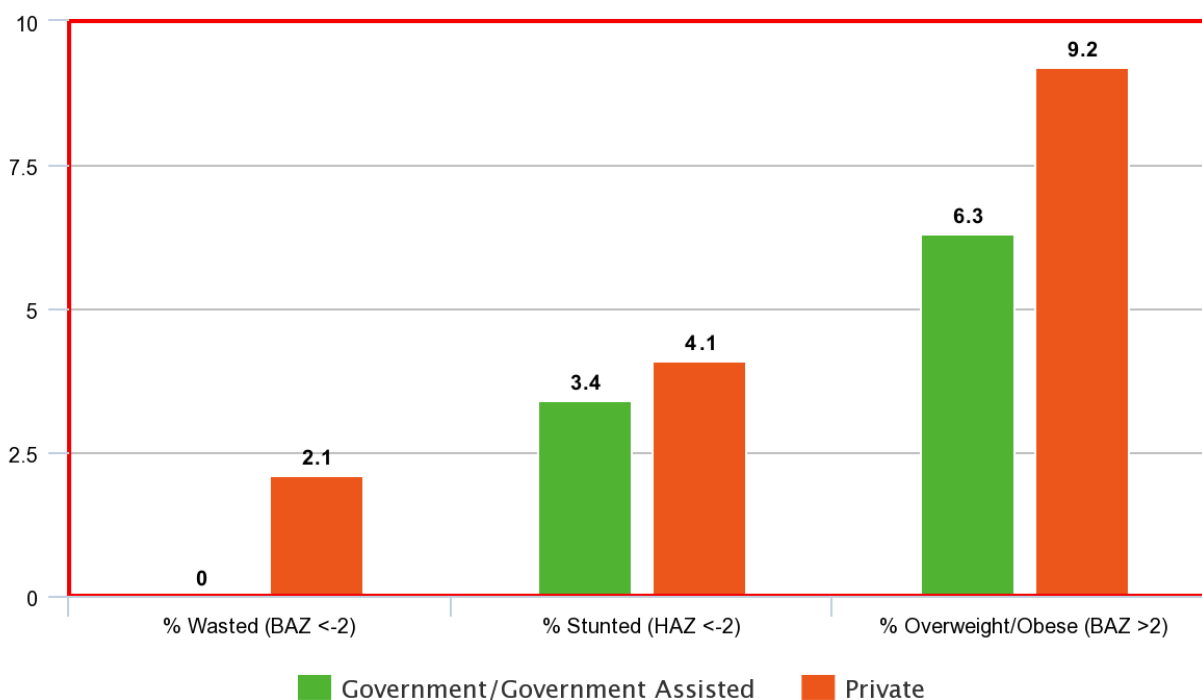


Table 5: Day Care Assessment Table

Centers	No. of Centres	No. Assessed	No. Wasted (BAZ <-2)	% Wasted	No. Overweight/ Obese (BAZ >2)	% Overweight/ Obese	No. Stunted (HAZ<-2)	% Stunted
Government/ Government Assisted	11	268	0	0	17	6.3	9	3.4
Private	38	487	10	2.1	45	9.2	20	4.1
TOTALS	49	755	10	1.3	62	8.2	29	3.8

Chart 4:

Comparison of the Children with Abnormal Nutritional Status (%) in Government/Government-Assisted and Private Day Care Centers.



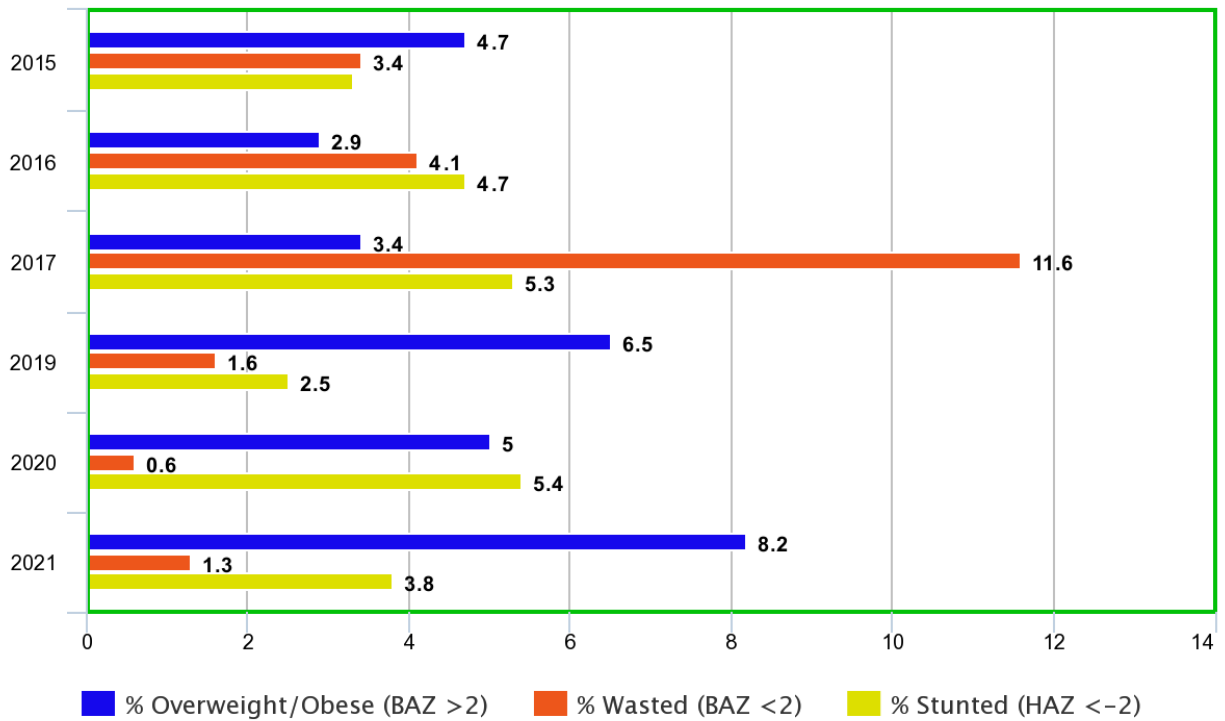
YEAR	INDICATOR USED	No. of Children assessed	No. Overweight/ Obese	% Overweight/ Obese	No. Wasted/ Thin	% Wasted/ Thin	No. Stunted	% Stunted
2015	BMI for age z-score (WHO Anthropometric)	786	37	4.7	27	3.4	26	3.3
2016	BMI for age z-score (WHO Anthropometric)	727	21	2.9	30	4.1	34	4.7
2017	BMI for age z-score (WHO Anthropometric) (Newly enrolled only)	548	19	3.4	64	11.6	29	5.3
2019	BMI for age z-score (WHO Anthropometric)	958	62	6.5	15	1.6	24	2.5
2020	BMI for age z-score (WHO Anthropometric)	833	42	5	5	0.6	45	5.4
2021	BMI for age z-score	755	62	8.2	10	1.3	29	3.8

Table 6: Comparison of the children with malnutrition over the past six (6) years

	(WHO Anthropometric)							
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Chart 5:

Comparison (%) of the Children with Malnutrition over the past Six (6) years



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SUMMARY

- 90.5% of the children measured had normal BAZ status for their age.
- When compared to the 2020 Day Care Survey, there was an increase in the percentage of children that were overweight or obese (5% to 8.2%), at risk of being overweight (16.3% to 17.7%), and wasted/thin (0.6% to 1.3%). On the other hand, there was a decrease in the percentage of children-that were stunted (5.4% to 3.8%).
- There were a greater percentage of overweight or obese males (9.9%) than females (6.6%). However, a higher percentage of females were stunted (4.5%) than males (3.2%). The percentage of children wasted was roughly equal for both sexes (1.3%).
- When compared to the private day care centres, the government/government assisted day care centres had a lower percentage of children that were wasted (0%), overweight or obese (6.3%), or stunted (3.4%).

- The parishes of St. John, St. Mark, St. Patrick, St. David and Carriacou recorded no wasted/thin children. St. Patrick and St. David also did not record any stunted children.
- The highest percentages of overweight children were from Carriacou (13.5%) followed by St. Patrick (11.8%), while the highest percentage of wasted/thin children were from St. Andrew (3.1%)

CHALLENGE

The advent of COVID-19 has significantly impacted the number of persons gainfully employed in Grenada. These increased unemployment rates had an effect on the number of parents that needed to send their child/children to daycare. Therefore, the survey may have missed a significant number of young children in the population.

RECOMMENDATIONS

- Nutrition Officers to recheck and follow-up with all children identified with abnormal status in their respective parishes.
- Nutrition Officers to discuss findings with caregivers and give guidance to address identified problems.
- Nutrition Officers to schedule discussion with parents of children identified with abnormal status.
- Plan training sessions with caregivers in day care centers to assist with meal planning and portioning.
- Monitor private centers to supervise and assist with meal planning and preparation of meals served.
- Standardize the time to conduct survey.
- Day care centres to record weight of new enrollees (to be used as base line or reference)
- Share this information with relative stakeholders to plan for collaborative intervention.