

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Anaemia

### Key facts

- A healthy diet helps to protect against malnutrition in all its forms, as well as noncommunicable diseases (NCDs), including such as diabetes, heart disease, stroke and cancer.
- Unhealthy diet and lack of physical activity are leading global risks to health.
- Energy intake (calories) should be in balance with energy expenditure. To avoid unhealthy weight gain, total fat should not exceed 30% of total energy intake (1, 2, 3). Intake of saturated fats should be less than 10% of total energy intake, and intake of trans-fats less than 1% of total energy intake, with a shift in fat consumption away from saturated fats and trans-fats to unsaturated fats (3), and towards the goal of eliminating industrially-produced trans-fats (4, 5, 6).
- Limiting intake of free sugars to less than 10% of total energy intake (2, 7) is part of a healthy diet. A further reduction to less than 5% of total energy intake is suggested for additional health benefits (7).
- Keeping salt intake to less than 5 g per day (equivalent to sodium intake of less than 2 g per day) helps to prevent hypertension, and reduces the risk of heart disease and stroke in the adult population (8).



### Anaemia- A serious global public health problem

Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. Haemoglobin is needed to carry oxygen and if you have too few or abnormal red blood cells, or not enough haemoglobin, there will be a decreased capacity of the blood to carry oxygen to the body's tissues. This results in symptoms such as fatigue, weakness, dizziness and shortness of breath, among others. The optimal haemoglobin concentration needed to meet physiologic needs varies by age, sex, elevation of residence, smoking habits and pregnancy status. The most common causes of anaemia include nutritional deficiencies, particularly iron deficiency, though deficiencies in folate, vitamins B12 and A are also important causes; haemoglobinopathies; and infectious diseases, such as malaria, tuberculosis, HIV and parasitic infections.

Source: <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>

## EPI WEEK 39

### SYNDROMES

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#### SENTINEL SYNDROMIC SURVEILLANCE

### Sentinel Surveillance in Jamaica



A syndromic surveillance system is good for early detection of and response to public health events.

Sentinel surveillance occurs when selected health facilities (sentinel sites) form a network that reports on certain health conditions on a regular basis, for example, weekly. Reporting is mandatory whether or not there are cases to report.

Jamaica's sentinel surveillance system concentrates on visits to sentinel sites for health events and syndromes of national importance which are reported weekly (see pages 2 -4). There are seventy-eight (78) reporting sentinel sites (hospitals and health centres) across Jamaica.

Table showcasing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks - 34 2021 to 37 of 2021

Parish health departments submit reports weekly by 3 p.m. on Tuesdays (T). Reports submitted after 3 p.m. are considered late e.g. Wednesdays (W).

Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2021													
36	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	Late (W)	Late (W)
37	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time
38	On Time	On Time	On Time	Late (T)	On Time	On Time	Late (T)	Late (W)	On Time	On Time	On Time	On Time	On Time
39	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	Late (W)

## REPORTS FOR SYNDROMIC SURVEILLANCE



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

## FEVER

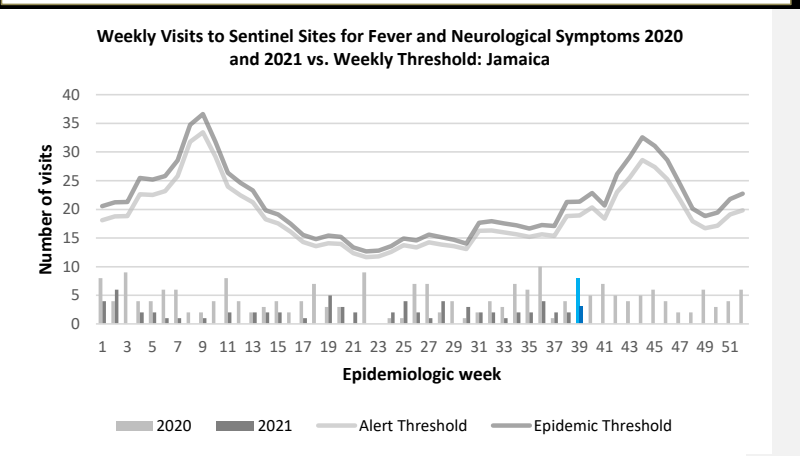
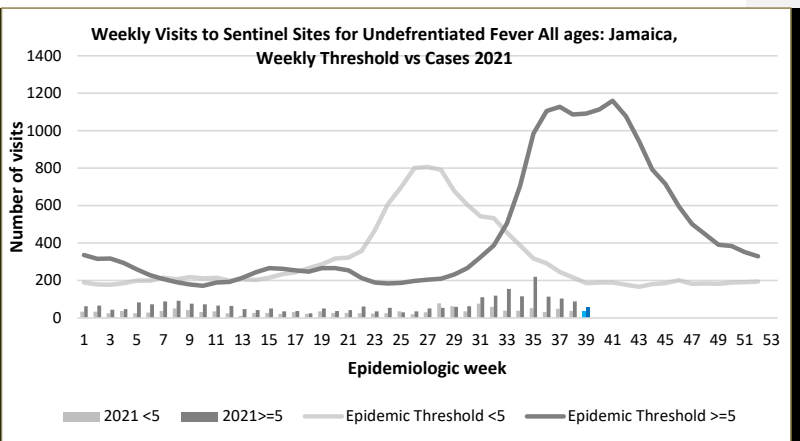
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



**KEY**  
VARIATIONS OF **BLUE**  
SHOW CURRENT WEEK

## FEVER AND NEUROLOGICAL

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person with or without headache and vomiting. The person must also have meningeal irritation, convulsions, altered consciousness, altered sensory manifestations or paralysis (except AFP).



3 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



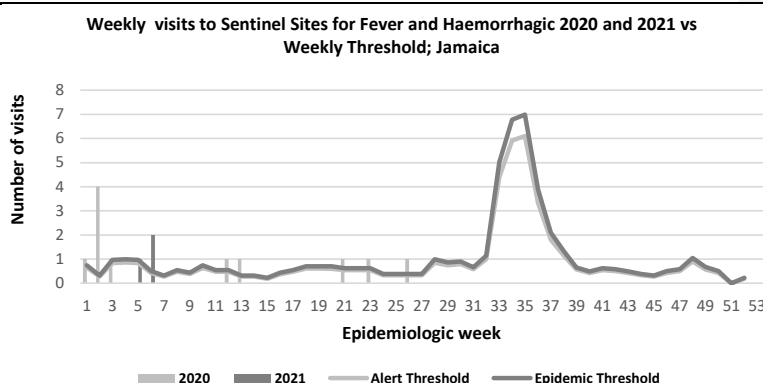
HOSPITAL  
ACTIVE  
SURVEILLANCE-  
30 sites. Actively  
pursued



SENTINEL  
REPORT- 78 sites.  
Automatic reporting

## FEVER AND HAEMORRHAGIC

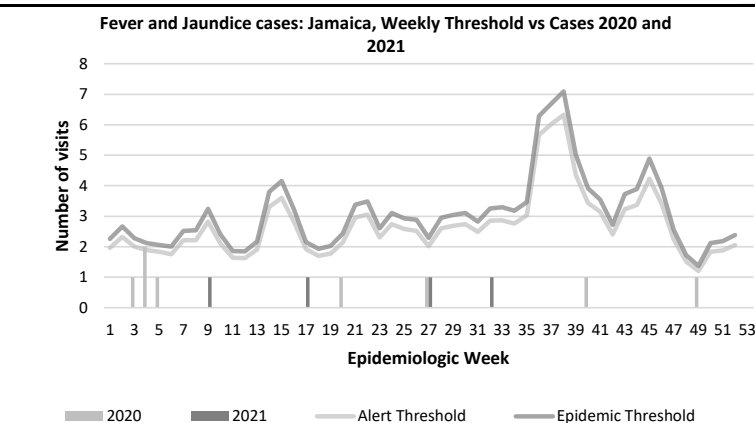
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



## FEVER AND JAUNDICE

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with jaundice.

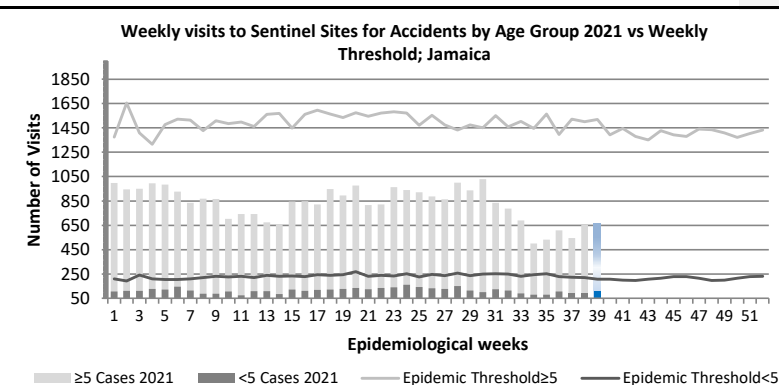
The epidemic threshold is used to confirm the emergence of an epidemic in order to implement control measures. It is calculated using the mean reported cases per week plus 2 standard deviations.



## ACCIDENTS

Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

**KEY**  
VARIATIONS OF BLUE  
SHOW CURRENT WEEK



4 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



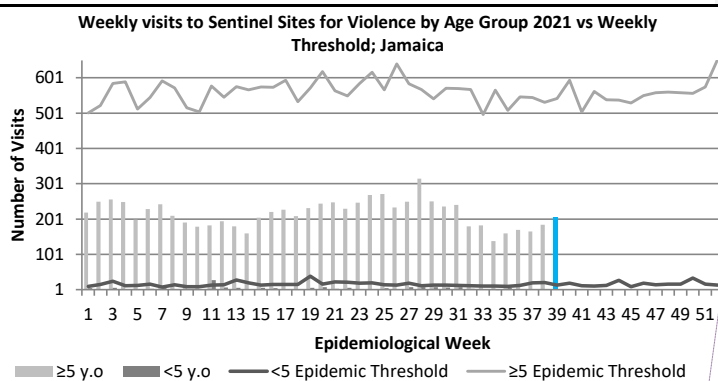
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REPORT- 78 sites.  
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## VIOLENCE

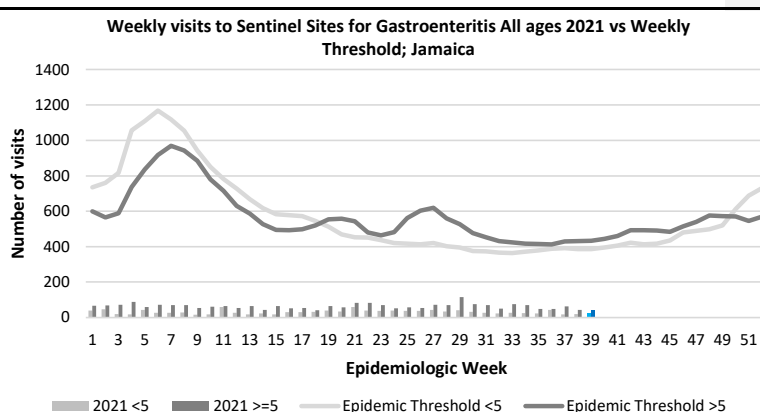
Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



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## GASTROENTERITIS

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



## CLASS ONE NOTIFIABLE EVENTS

## Comments

	CLASS 1 EVENTS	Confirmed YTD <sup>a</sup>		AFP Field Guides from WHO indicate that for an effective surveillance system, detection rates for AFP should be 1/100,000 population under 15 years old (6 to 7) cases annually.
		CURRENT YEAR 2021	PREVIOUS YEAR 2020	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	95 <sup>β</sup>	82 <sup>β</sup>	
	Cholera	0	0	
	Dengue Hemorrhagic Fever <sup>γ</sup>	See Dengue page below	See Dengue page below	
	Hansen's Disease (Leprosy)	0	0	
	Hepatitis B	2	3	

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5 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

	Hepatitis C		0	0	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis (Clinically confirmed)		30	1	
EXOTIC/ UNUSUAL	Plague		0	0	7 Dengue Hemorrhagic Fever data include Dengue related deaths;
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	
	Neonatal Tetanus		0	0	8 Figures include all deaths associated with pregnancy reported for the period.
	Typhoid Fever		0	0	
	Meningitis H/Flu		0	0	8 CHIKV IgM positive cases 9 Zika PCR positive cases 10 Updates made to prior weeks in 2020. 11 Figures are cumulative totals for all epidemiological weeks year to date.
SPECIAL PROGRAMMES	AFP/Polio		0	0	
	Congenital Rubella Syndrome		0	0	
	Congenital Syphilis		0	0	
	Fever and Rash	Measles	0	0	
		Rubella	0	0	
	Maternal Deaths <sup>8</sup>		51	36	
	Ophthalmia Neonatorum		0	38	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		34	29	
	Yellow Fever		0	0	
	Chikungunya <sup>9</sup>		0	0	NA- Not Available
	Zika Virus <sup>9</sup>		0	0	

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## NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 39*

September 26 – October 2, 2021 Epidemiological Week 39

	<i>EW 39</i>	<i>YTD</i>
SARI cases	10	515
Total Influenza positive Samples	0	0



6 NOTIFICATIONS-  
All clinical sites



INVESTIGATION  
REPORTS- Detailed Follow  
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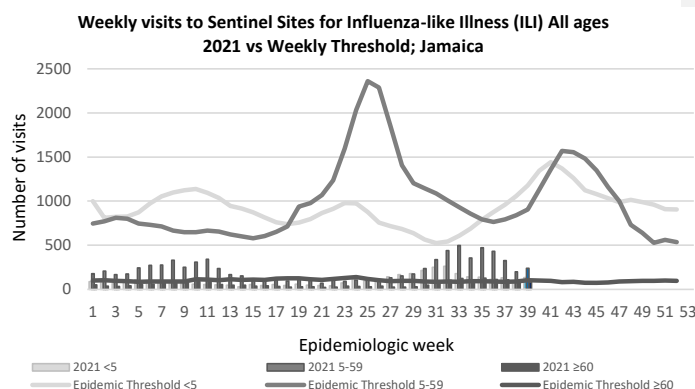
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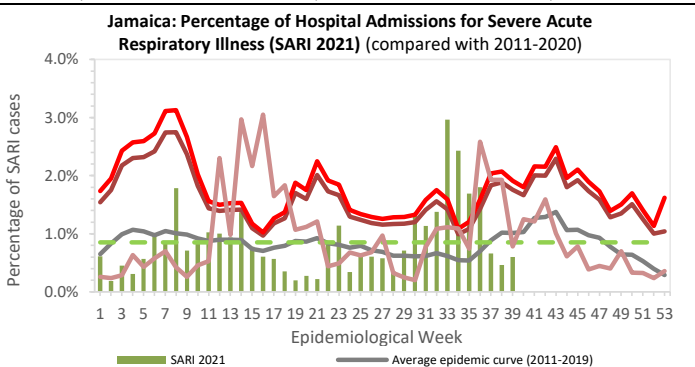
0799-3927

<b>Influenza A</b>	0	0
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
<b>Influenza B</b>	0	0
Parainfluenza	0	0



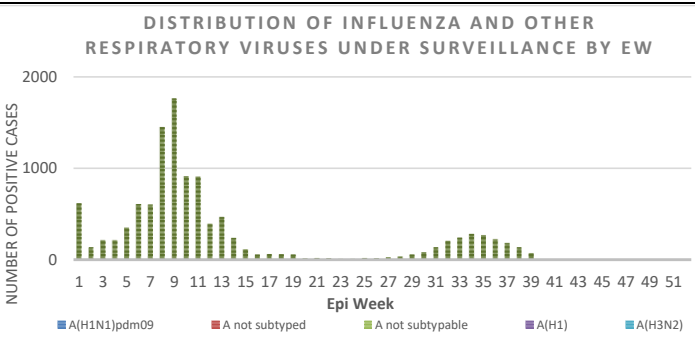
### Epi Week Summary

During EW 39, ten(10) SARI admissions were reported.



### Caribbean Update EW 39

**Caribbean:** Influenza activity remained low. In Belize, SARS-CoV-2 and RSV detections continued to increase and in Haiti, SARS-CoV-2 activity continued elevated and increasing.

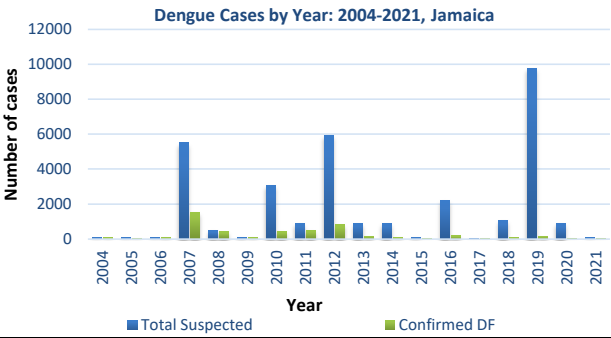


## Dengue Bulletin


September 26 – October 2, 2021 Epidemiological Week 39

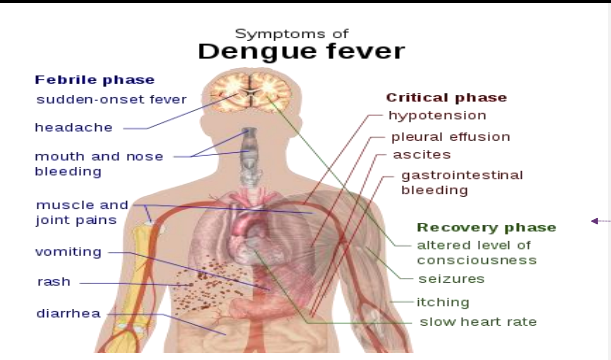
Epidemiological Week 39

 <b>7 NOTIFICATIONS-</b> All clinical sites	 <b>INVESTIGATION REPORTS-</b> Detailed Follow up for all Class One Events	 <b>HOSPITAL ACTIVE SURVEILLANCE-</b> 30 sites. Actively pursued	 <b>SENTINEL REPORT-</b> 78 sites. Automatic reporting
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**Reported suspected and confirmed dengue with symptom onset in week 39 of 2021**

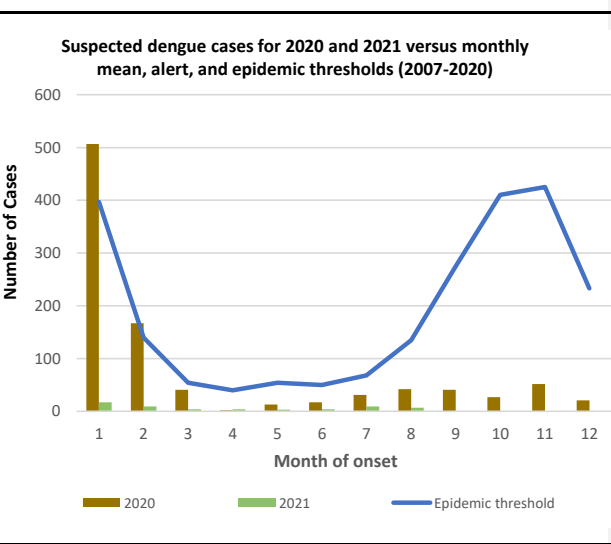
	2021*	
	EW 39	YTD
 Total Suspected Dengue Cases	0	53
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0



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**Points to note:**

- \*Figure as at September 7, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.





## RESEARCH PAPER

### Abstract

#### ***Entada gigas: Underutilized Plant for Food and Nutrition from an Indigenous Community in Jamaica***

Foster S R, Randle M M, Bozra D, Riley C K, Watson C T  
Scientific Research Council, Kingston, Jamaica

**Background:** *Entada gigas* (cacaoon) is a leguminous plant used by the Accompong maroons from St. Elizabeth, Jamaica, for medicinal and nutritional purposes. The plant seeds contain high protein levels, but are underutilized due to the anti-nutrients present.

**Objectives:** The effects of three processing methods (soaking, cooking and autoclaving) on proximate composition, anti-nutritional compounds and mineral content of *E. gigas* seeds collected were investigated.

**Methods:** Qualitative and quantitative evaluations of active phytochemical constituents, proximate and mineral analyses were performed on differentially processed *E. gigas* seed extracts using standard assays.

**Results:** Nutritional composition of mature *E. gigas* seeds corresponds with most edible legumes containing per 100 g edible portion: carbohydrate 50-55 g, protein 21-26 g, fat 15-20 g, crude fibre 5.3 g, and moisture 4.4 -5.9 g. Essential minerals including calcium (84.87 mg/L), iron (3.24 mg/L), potassium (793 mg/L), magnesium (112 mg/L), manganese (0.94 mg/L), sodium (7.24 mg/L) and zinc (1.49 mg/L) were also detected. Flavonoids, glycosides, steroids, terpenoids, saponins, tannins and phenols were among the phytochemicals present. Anti-nutritional substances present in the raw seeds, were effectively diminished after soaking for 21 days without significantly affecting the nutritionally beneficial compounds.

**Conclusion:** *Entada gigas* has nutritive values, comparable to other plant protein sources. Hence, its utilization is encouraged provided that an appropriate processing method is used to reduce the anti-nutrient content.



The Ministry of Health and Wellness  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: surveillance@moh.gov.jm



9 NOTIFICATIONS-  
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