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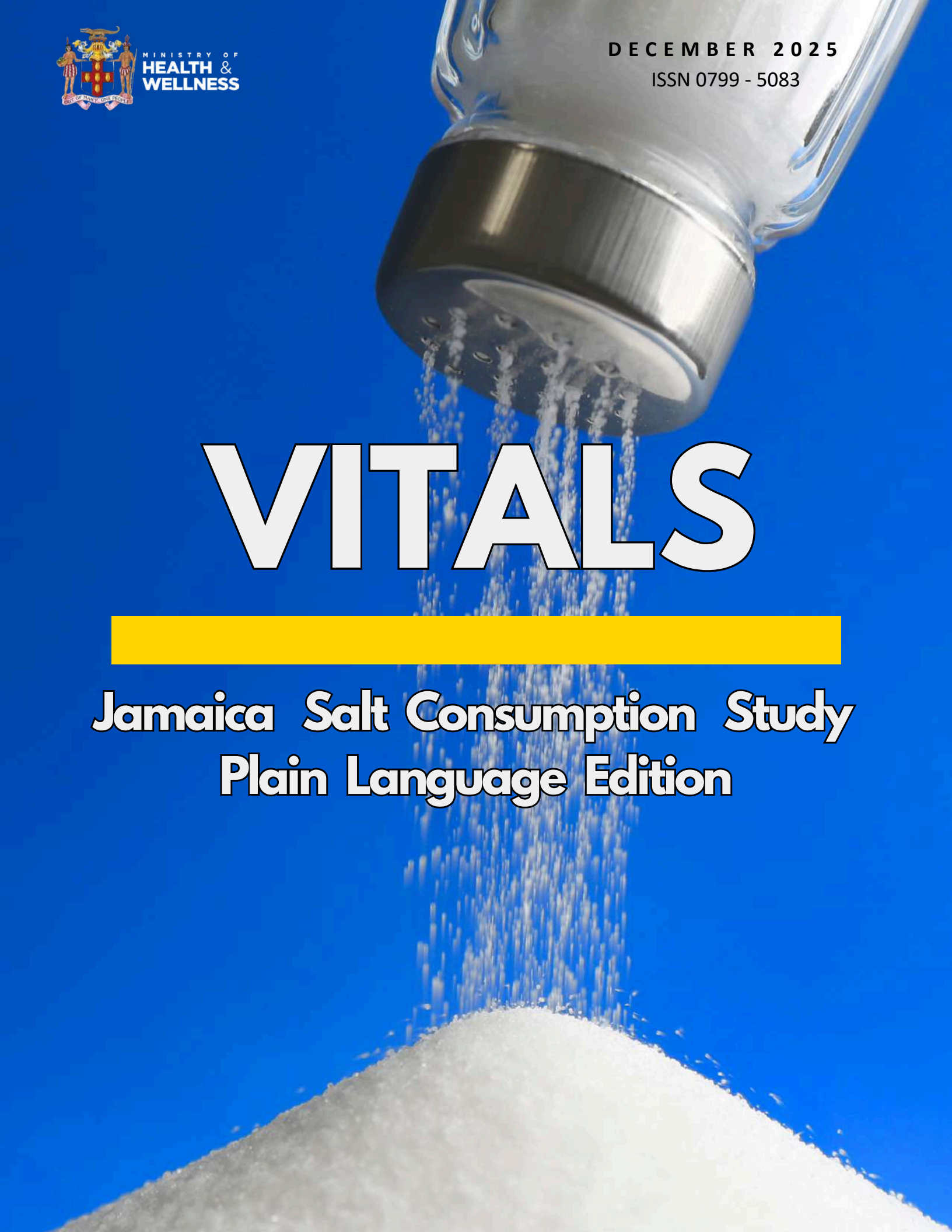

VITALS

Jamaica Salt Consumption Study
Plain Language Edition

Vitals

JAMAICA SALT CONSUMPTION STUDY PLAIN LANGUAGE EDITION

A QUARTERLY REPORT OF THE
MINISTRY OF HEALTH AND WELLNESS
JAMAICA 2025

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Contents

Editorial

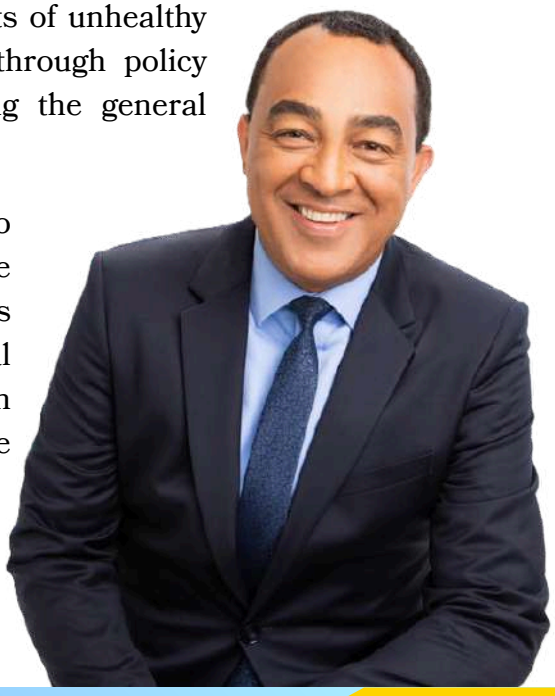
I give special recognition to the National Epidemiology Branch and the Technical Services Division of the Ministry of Health & Wellness, the editorial team and all the contributors of this important edition of the Vitals.

We have a duty in the Ministry of Health & Wellness to ensure that Jamaicans are aware of the harmful effects of unhealthy diets and have access to important nutritional information, which will allow them to make healthier food choices.

Salt is among the critical nutrients that have a negative effect on health. Evidence has shown that several health conditions are caused, or exacerbated by, a high salt diet. Salt has been linked to high blood pressure, cardiovascular disease (stroke, heart disease and heart failure), kidney disease and kidney stones, obesity, osteoporosis, stomach cancer and water retention. Globally, raised blood pressure is a major cause of cardiovascular disease, which is responsible for 62% of stroke and 49% of coronary heart disease. It was estimated that a reduction to 5g of salt per day would reduce stroke by 24% and coronary heart disease by 18%. This would prevent approximately 2.5 million deaths worldwide.

The results of the Jamaica Health and Lifestyle Survey showed a high prevalence of cardiovascular risk factors. Approximately one in three persons (34%) had hypertension, over 50% of Jamaicans were overweight or obese. Most of the population (82%) were also shown to engage in low levels of physical activity.

We have an obligation to protect Jamaicans from the harmful effects of unhealthy diets through our food policies and our food environment and through policy interventions in our schools, communities, workplace and among the general population.



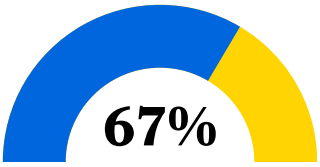
The Ministry of Health & Wellness continues to take steps to implement policies and programmes geared towards improving the food environment. Our policies are based on international standards and best practices and driven by the realities in our own national context. We believe in taking an evidence-based approach and in working with different groups across academia, civil society and the private sector.

Dr. the Hon. Christopher Tufton, CD, MP
Minister of Health & Wellness

Jamaica Salt Consumption Study Findings at a Glance

Sodium Consumption in 2023

Proportion of Jamaicans with High Sodium Consumption



Proportion of High Sodium Consumption by Age Group

71%

High sodium consumption is higher in younger persons

18-34 yrs

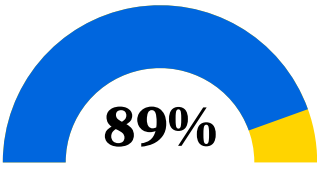
>75 yrs

42%

High sodium consumption is lower in older persons

Potassium Consumption in 2023

Proportion of Jamaicans with Low Potassium Consumption



Knowledge of Recommended Intake

15%

Correctly identified the recommended salt intake of 1 tsp/day

General Knowledge about Salt *

68%

Gave a correct response on general knowledge + the salt content of food items/groups

*Knowledge score includes general knowledge about salt and health as well as salt content of food items

Jamaica Salt Consumption Study Findings at a Glance

Perceptions vs Reality Regarding Salt Consumption

Perception	Reality
21%	**67%**
Jamaicans believed that they consumed **too much/far too much salt**	Jamaicans consumed **too much salt**

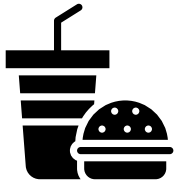
Perceptions of Food Labelling

97%

Jamaicans agreed that warning labels should be on food packages indicating salt levels

Restaurant Foods with Highest Sodium Content/100 mg*

1. Chicken (fried, nuggets, burgers)
2. Pizza
3. Chicken sandwich
4. Fish sandwich/fillet
5. Side orders (rice, breadsticks, sauce)



*Sodium content was assed using data from the USDA FoodData Central Database and is expressed as mg of sodium per 100 g food item. Food categories had different numbers of items assessed with the largest being pizza (26 items), fried chicken (20 items), side orders (11 items) and hamburgers (6 items)

HYPERTENSION : WHAT DO THE NUMBERS MEAN?

160+ / 100+ **Stage 2** Severe Hypertension (CRISIS)

140-159 / 90-99 **Stage 1** Hypertension

120-139 / 80-89 **Considered Pre-Hypertension**
This means you are at risk of developing hypertension

Your blood pressure is NORMAL!
Have it checked at least once a year to be sure it stays within the normal range

<120 / <80

HYPERTENSION

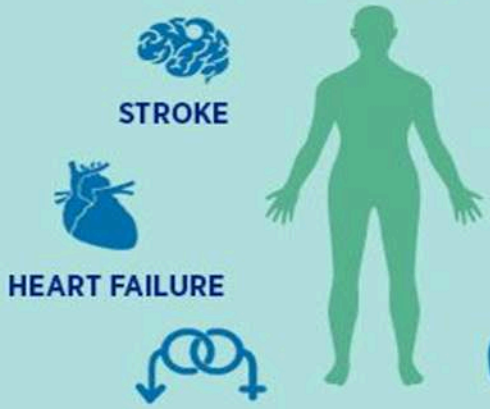
is called a 'silent killer' because persons whose blood pressure is elevated or high usually don't have any symptoms.

SYMPTOMS OF SEVERE HIGH BLOOD PRESSURE:

- SEVERE HEADACHE
- BLURRY VISION
- IRREGULAR HEARTBEAT
- FATIGUE OR CONFUSION
- SHORT OF BREATH
- CHEST PAIN
- NOSE BLEEDS OR BLOOD IN THE URINE

COMMON RISK FACTORS

COMPLICATIONS OF HYPERTENSION



HOW TO REDUCE MY RISK


EAT HEALTHY


REDUCE ALCOHOL INTAKE


REDUCE SALT INTAKE

NO SMOKING


DRINK WATER

EXERCISE

KNOW YOUR NUMBERS | Get Regular Health Checks/Screening • Early Detection & Frequent Monitoring Are Key To Preventing Or Delaying Hypertension & Its Complications

Introduction

Introduction

Salt is a food item found in many households. Its importance has been recorded in history[1]; in some instances, it was considered to be so valuable that it was used as currency[2]. Salt was a symbol of loyalty, and in ancient times was thought to promote health[1]. In fact, the Latin words for 'health' and 'healthy' (*salus, salubris*) were derived from the Latin word for 'salt' (*sal*)[1].

Unfortunately, salt no longer symbolises health, as globally most populations consume too much salt, which has led to negative health consequences such as high blood pressure, heart disease and stroke[3,4]. High sodium consumption has also been linked to higher mortality from heart disease.[4]

Salt has become a staple in many households as well as in manufacturing, and has many uses. These include food preservation, improving the taste of foods, enhancing other flavours, promoting food stability, controlling the growth of microorganisms and promoting food texture and colour[2,5]. Data from other studies has shown that the salt added while preparing, cooking and eating foods only accounts for 15-20% of the total sodium derived from the diet[2,3.] The majority (65-70%) of dietary salt is obtained from the consumption of processed foods. As the salt content of some foods is influenced by factors outside of the home, emphasis should therefore be placed on reducing sodium intake[2], employing a number of strategies.

Prior to 2023 there was limited data on sodium consumption in the Jamaican population. The Jamaica Salt Consumption Study was conducted by the Caribbean Institute for Health Research for the Ministry of Health and Wellness (MOHW) to provide baseline data on salt consumption as well as assessing the knowledge, attitudes and practices regarding salt consumption. The resulting data will be used to guide policies pertaining to sodium reduction.[6]

This publication shares selected findings of the Jamaica Salt Consumption Study in plain language. The first section of this report covers the role of sodium and potassium in health. Later sections cover the study methodology and findings. The final section describes, in brief, core elements of the sodium reduction response.

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1. Ritz E. The history of salt - aspects of interest to the nephrologist. Nephrol Dial Transplant. 1996 Jun;11(6):969-75. doi: 10.1093/oxfordjournals.ndt.a027517. PMID: 8671953..
2. Durack, Edel & Alonso-Gomez, Mercedes & Wilkinson, Martin. (2008). Salt: A Review of its Role in Food Science and Public Health. Current Nutrition & Food Science. 4. 290-297. 10.2174/157340108786263702.
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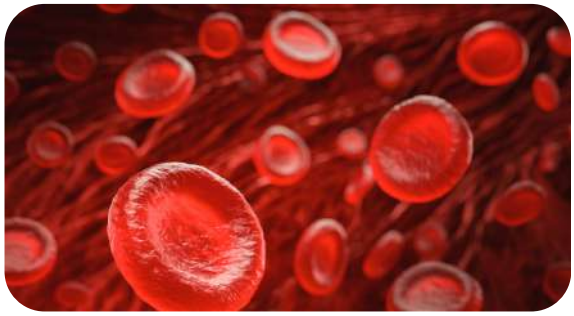
Introduction

The Role of Sodium in the Body

Minerals are essential for the proper functioning of the human body[1, 2]. The main minerals in our body are calcium, chloride, magnesium, phosphate, potassium and sodium [1].

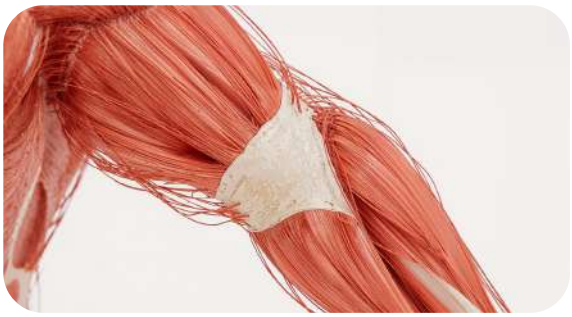
Sodium helps to regulate water balance

It helps cells use nutrients and water



It helps to regulate blood pressure

It helps our muscles to contract



It helps nerves to send messages throughout our body

Sources:

1. Shrimanker I, Bhattarai S. Electrolytes [Internet]. National Library of Medicine. StatPearls Publishing; 2023. Available from: https://www.ncbi.nlm.nih.gov/books/NBK541123/
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Introduction

Sodium versus Salt

Sodium is a naturally occurring mineral found in nature. It is one of the main minerals in seawater, the soil and our food.

=

Sodium (Na) in nature is usually found attached to another mineral called chloride (Cl). This is called salt (sodium plus chloride - NaCl).

Whether derived naturally from foods or added to foods, the human body processes salt in the same way.

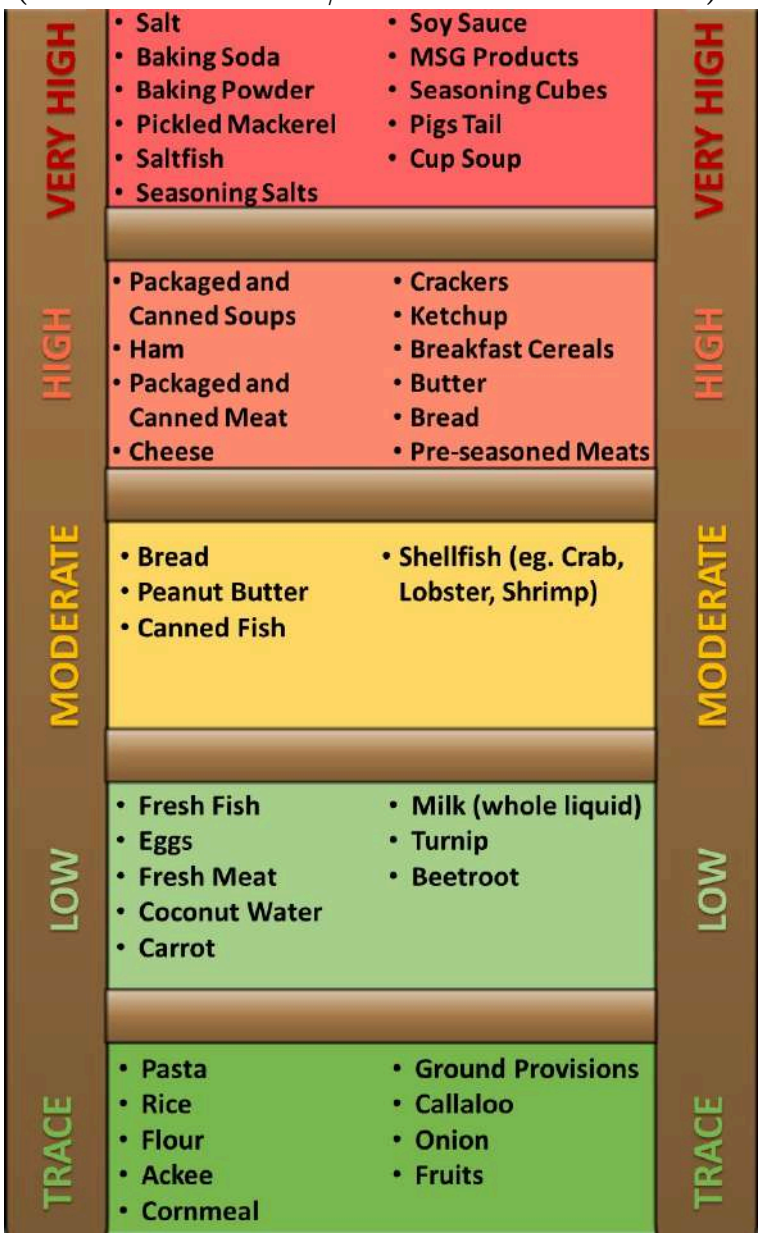
1 teaspoon

The World Health Organization recommends <5g of salt or 1 teaspoon of salt per day for adults.

Introduction

Sodium is found in a number of foods and is regularly consumed in processed foods[1]. The major sources of dietary salt in low-and-middle-income countries (LMIC) as at 2011, were bread, meat, meat products, bakery products, instant noodles, salted preserved foods, milk and dairy products and condiments[1]. The sodium ladder below shows low to very high sources of sodium.

The Sodium Ladder[2]
(Sources and Amount/Levels of Sodium in Food)



Sources:

1. Legetic B, Campbell N. Reducing Salt Intake in the Americas: Pan American Health Organization Actions. Journal of Health Communication. 2011 Aug 31;16(sup2):37–48.
2. Adapted with permission from Patricia Thompson 2022, Jamaica Island Nutrition Network/Institute of Nutrition and Wellness Studies (JINN/INWES)

Introduction

Apart from table salt, sodium may be found in other food sources. Sodium nitrite is found in cured meats such as ham, bacon, salami, sausages and smoked and deli meats. In a Jamaican study the most common sources of sodium in pre-packaged foods and beverages sold in Jamaica were sodium chloride, sodium benzoate, baking soda, soy sauce, carrageenan and sodium carboxymethyl cellulose (cellulose gum) [1].

Most Common Sources of Sodium in Pre-packaged Foods and Beverages Sold in Jamaica

Sodium chloride

Sodium benzoate

Carrageenan

Baking soda and soy sauce

Sodium carboxymethyl cellulose (cellulose gum)

Sources:

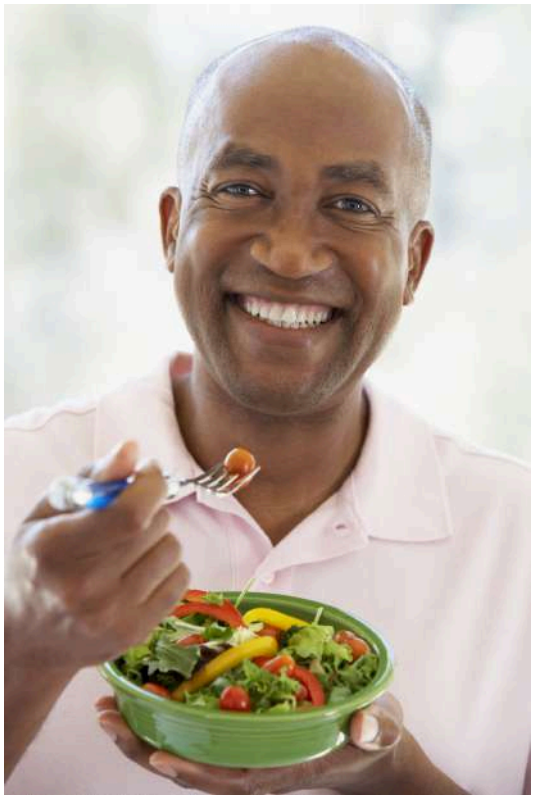
1. Legetic B, Campbell N. Reducing Salt Intake in the Americas: Pan American Health Organization Actions. Journal of Health Communication. 2011 Aug 31;16(sup2):37–48.

Introduction

Importance of Potassium

Potassium is another essential mineral for the body [1, 2]. It is the main component of the fluid inside the cells while sodium is found outside the cell. Sodium and potassium are closely connected and work together to balance the body's functions [1, 2].

Potassium is important in blood pressure control [3]. Several studies showed a reduced risk for diseases related to high blood pressure when greater amounts of potassium are consumed [3,4]. Eating more potassium can help lower blood pressure and keep heart and blood vessels healthy [4]. This reduces the risk of cardiovascular diseases, stroke and kidney disease [5].



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Introduction

Eating foods that are naturally low in sodium and high in potassium helps regulate healthy blood pressure [1]. Potassium is found in a wide range of foods[2], but plant-based foods are among the richest sources [1]. Examples of foods high in potassium include:

- **Fruits**: Ripe banana, papaya, orange, grape fruit, June plum, guava, naseberry, mango, sweet sop, sour sop, grapes, raisins and coconut water [2,3,4]
- **Vegetables**: Green leafy vegetables (such as callaloo, pakchoi), broccoli, pumpkin, carrot and cauliflower [2,3,4]
- **Provisions**: Breadfruit, green plantain, and green banana [2,3]
- **Ground provisions**: Yams, coco, dasheen, sweet potato, and Irish potato [2,3,4]
- **Legumes and nuts:** Peas and beans (such as red peas, gungo peas, lentils, etc.), nuts (such as peanuts, cashew, almonds etc.) [2,3,4]
- **Fats and oils**: Avocado and ackee [3,4]

These foods also provide fibre, antioxidants, and a wide range of essential vitamins and minerals. Animal-based foods such as fish, meats, milk and yoghurt generally provide moderate levels of potassium [3,4].

Sources of Potassium

Fruits

Vegetables

Staples: Ground Provisions

Legumes, Peas, Beans and Nuts

Fats and Oils: Avocado/Pear

Foods from Animals: Meats, Poultry, Fish, Milk and Yogurt

Sources:

1. Palmer BF, Gates Colbert, Clegg DJ. Potassium Homeostasis, Chronic Kidney Disease, and the Plant-Enriched Diets. Kidney360 [Internet]. 2020 Jan 30;1(1):65–71. Available from: https://kidney360.asnjournals.org/content/1/1/65
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4. Whitney EN, Cataldo CB, Rolfes SR. Understanding Normal and Cinical Nutrition. 6th ed. Belmont (CA): Wadsworth; 2002.

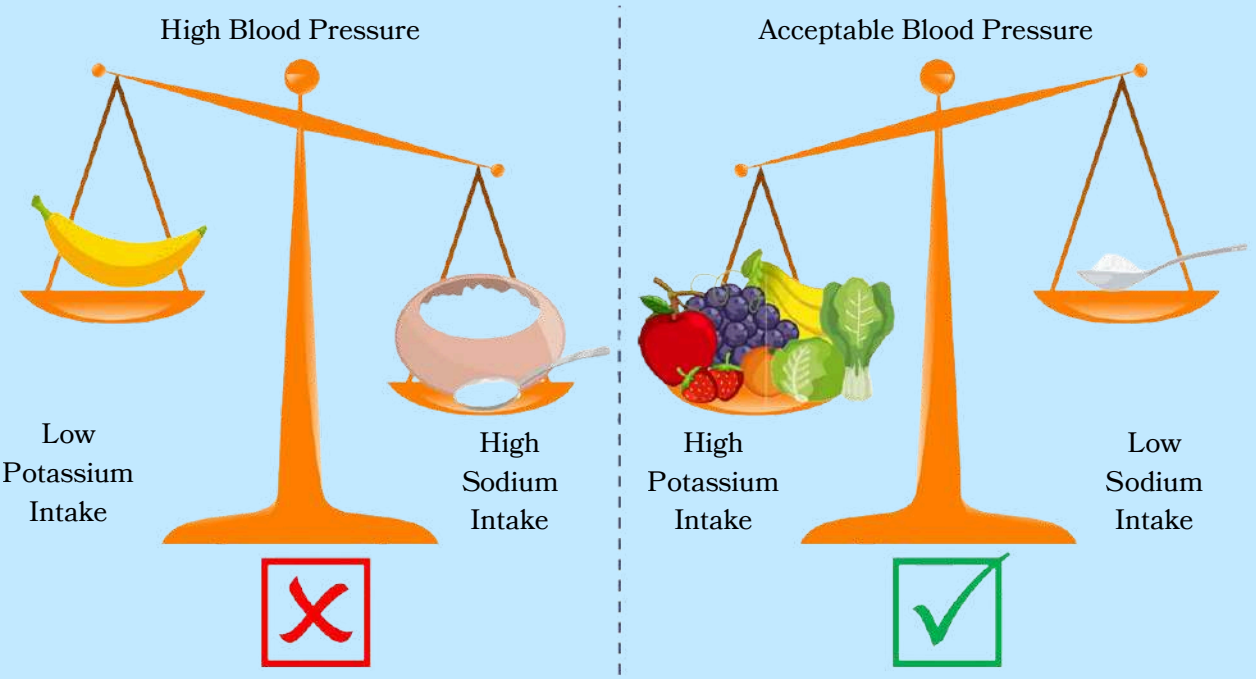
Introduction

The Sodium to Potassium Balance

Our bodies are healthiest when potassium intake is higher than sodium [1]. Maintaining the ideal balance of sodium to potassium can be achieved with proper dietary intake [2]. **The WHO recommends 2,000 mg of sodium per day and 3,510 mg of potassium for adults [3].** Of note, persons of African descent may be particularly sensitive to an imbalance in the amounts of sodium and potassium [4,5].

Our ancestors consumed foods high in potassium and low in sodium; however, modern diets are now usually low in potassium and high in sodium[6]. This change in the diet has led to the development of lifestyle diseases such as high blood pressure and other cardiovascular diseases, kidney disease and cancers[6].

Relationship Between Sodium and Potassium



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Introduction

Harmful Effects of High Sodium and Low Potassium Intake

Consistently high consumption of sodium increases the risk of osteoporosis (which causes the bones to be weak and break easily), severe asthma and obesity[1]. Diseases of the heart such as heart attack and heart failure are strongly linked to high salt consumption [2,3].

An inadequate potassium level may also increase the risk of stroke [4].

An international study about blood pressure in 32 countries showed that populations with increased sodium intake had a greater number of persons with hypertension [1,2]. Maintaining the ideal balance of sodium to potassium has a greater effect on blood pressure, than sodium or potassium levels alone [4,5].

Studies from the USA, Europe, China and Japan have shown a link between high sodium intake and stomach cancer [1].

Sources:

1. Legetic B, Campbell N. Reducing Salt Intake in the Americas: Pan American Health Organization Actions. Journal of Health Communication. 2011 Aug 31;16(sup2):37–48.
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Introduction

Maintaining the Sodium to Potassium Balance in Daily Life

Eating foods that are naturally low in sodium but high in potassium, such as fresh fruits and vegetables, can create the desired balance that allows for blood pressure regulation. This can be achieved through following the Food Based Dietary Guidelines for Jamaica[1].

The Food Based Dietary Guidelines are represented in the form of a plate that shows the recommended proportions of six food groups that an individual should eat. The main food groups are (1) fruits (2) vegetables (3) staples (4) legumes and nuts (5) food from animals and (6) fats and oils. The size of each section of the plate shows the volume that each food group should contribute to the daily diet. More details on the Food Based Dietary Guidelines are given on page 65.

The Food Based Dietary Guidelines for Jamaica

Source:

1. Ministry of Health and Wellness. Food Based Dietary Guidelines. Ministry of Health and Wellness. Accessed December 13, 2025. https://www.moh.gov.jm/programmes-policies/food-based-dietary-guidelines/


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About the Jamaica Salt Consumption Study

About the Jamaica Salt Consumption Study

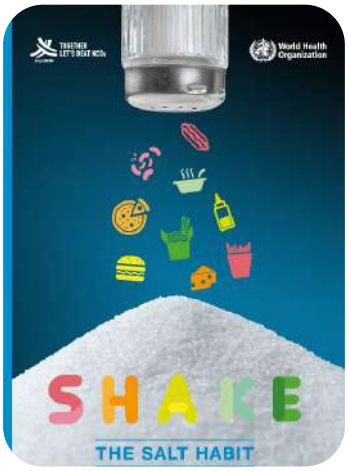
Rationale

Study Rationale and Objectives

High blood pressure is defined as having a blood pressure reading of greater than 140/90 mm Hg. Pre-hypertension is defined as a blood pressure reading falling between 120/80 mm Hg and 139/89 mm Hg. Hypertension is a leading cause of illness and death worldwide [1,2]. The third Jamaica Health and Lifestyle Survey (2017) showed that one in three Jamaicans (34%) were hypertensive, while a further one third (34%) were pre-hypertensive[3]. Data from the Office of the Registrar General has shown that cardiovascular disease (which includes high blood pressure) was responsible for one third or 32% of deaths in both 2016 and 2020[4,5].

There are many factors which may lead to the development of hypertension. Some cannot be changed, such as the genes we inherit, while others such as obesity, harmful use of alcohol and salt consumption are behavioural in nature and may be modified[5]. Data has shown that salt consumption worldwide is higher than recommended[7].

There is very little data on sodium consumption in Jamaica. The Jamaica Salt Consumption Study was designed to provide this and other important data to guide a national salt reduction programme based on the WHO SHAKE Technical Package[2].



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The Jamaica Salt Consumption Study

Methodology

Purpose of Study

To find out what persons know about salt and how much salt they usually consume

To estimate salt in the urine by testing urine samples collected during the survey

To find out how much salt is used in the preparation of restaurant foods

To create a first time survey on knowledge, attitudes and practices regarding salt intake in Jamaica

Participants in the Study

1,002 persons who were 18 years or older, participated in the study. They were identified from 60 randomly selected communities across all 14 parishes

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

About the Jamaica Salt Consumption Study

Methodology

Data were collected using questionnaires and urine samples

All data collectors were trained before they could start interviewing persons or collecting urine samples

Information was entered on tablets and only approved persons had the passwords. The information collected on paper was later entered into the electronic platform.

The electronic platform used was REDCAP. This is a safe and secure system to protect the information collected.

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

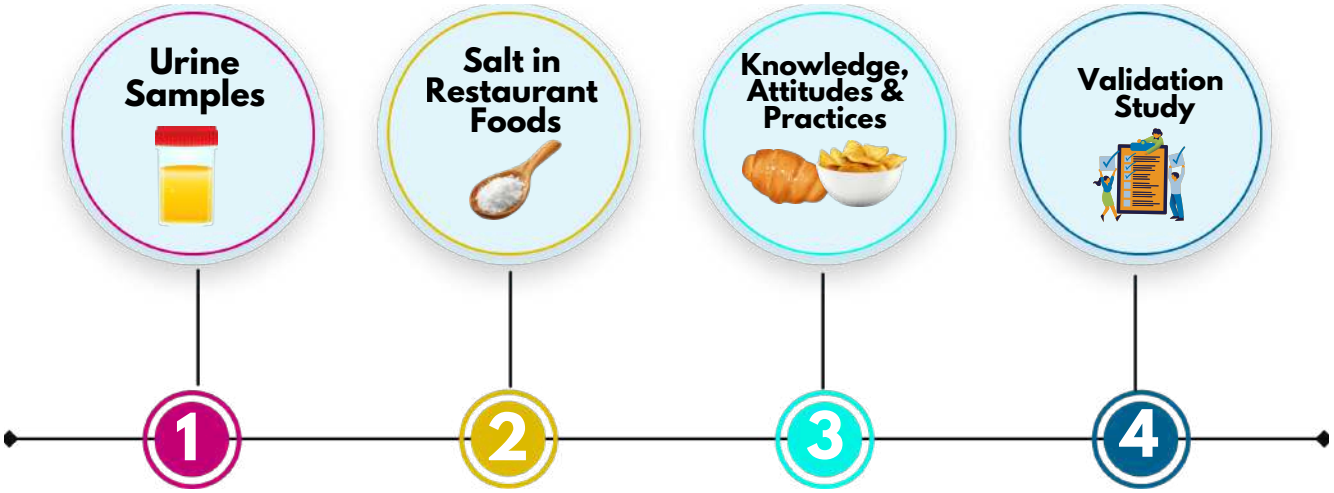
About the Jamaica Salt Consumption Study

Methodology

As a quality check, 10% of participants repeated the survey to see if their answers remained the same.

The data were adjusted to ensure that the results would represent Jamaica. Age, sex, level of education and area of residence (urban / rural) were also considered in the presentation of findings.

There were four (4) components to the Methodology



1009 samples from JHLSIII were analysed to obtain estimates for 2016-2017, and 486 samples were analysed for 2022-2023

29 restaurants identified through search of the telephone directory.

1,002 persons questioned on knowledge, attitudes and practices related to salt.

To compare results of the questionnaire with the urine sample test results.

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

MINISTRY OF HEALTH & WELLNESS

World Hypertension Day

A Healthy Lifestyle is key to preventing and controlling Hypertension.

Reduce your risk:

- Eat healthy
- Reduce alcohol
- Reduce salt
- Drink water
- Increase physical activity
- No smoking
- Get regular check-ups

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Findings from the Jamaica Salt Consumption Study

Findings from the Jamaica Salt Consumption Study

Study Characteristics

What Can We Imply About the Population From the Study?

The study team approached 1,364 participants. Just over one thousand (1,002) agreed to participate.

The following shows the characteristics of the study participants, that were representative of the overall Jamaican population:

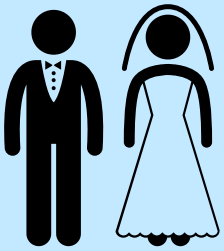
Characteristics of the Jamaican Population Based on who Took Part in the Study

What would the Jamaican population look like based on who took part in the study?

Age Group

18 - 34yrs	35 - 54yrs	55 - 74yrs	≥ 75yrs
43.7%	33.4%	17.3%	5.6%

Marital Status

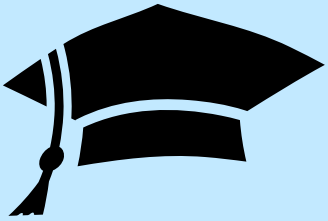


- 18.8% Currently Married
- 57.2% Never Married
- 8.3% Separated/Divorced
- 3.0% Widowed

Employment Status

- 28.9% Not Working
- 49.1% Full Time Employed
- 14.4% Part Time Employed
- 7.6% Seasonally Employed

Education Level



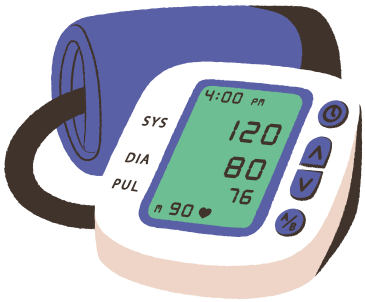
- 13.0% Less than High School
- 50.4% High School
- 36.6% More than High School

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

NCDs and NCD Risk Factors

In addition to sodium consumption, the study collected data on non-communicable diseases (NCDs) and risk factors. The proportion of Jamaicans who were found to have these conditions and/or factors are given below:



High Blood Pressure:

- High blood pressure may be defined as a sustained elevation of an individual's blood pressure at or above 140/90 mm Hg.
- About 4 in 10 (38.7%) Jamaicans had high blood pressure.
- A higher percentage of females (41.2%) had high blood pressure compared to males (35.6%).

High Body Mass Index (BMI):

- Body Mass Index is a measure of how much body weight a person has compared to their height. A BMI of 25.0-29.9 means you are overweight while a value of ≥ 30 means you are obese.
- The study reported that one in three Jamaicans (33.1%) were obese while one in four (25.0%) were overweight.
- A higher percentage of females (46.2%) were obese when compared to males (16.9%).

High Waist Circumference:

- Measuring waist circumference helps to identify possible health risks that are linked to overweight or obesity. A higher waist circumference is linked to increased risk of NCDs. A waist circumference greater than 94 cm (37.0 inches) in males or 80 cm (31.5 inches) in females is considered high [1].
- Almost half (49.4%) of Jamaicans had a high waist circumference.
- About seven in ten (72.7%) females had a high waist circumference compared with two in ten (20.8%) males.

Sources:
1. Non-Communicable Disease and Injury Prevention and Control. Ministry of Health and Wellness. https://ncdip.moh.gov.jm/?s=hypertension
   Cannabis Health Effects. Cannabis and Public Health. CDC. https://www.cdc.gov/cannabis/health-effects/index.html
2. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

NCDs and NCD Risk Factors

Physical Activity:

- Physical activity is defined as any bodily movement that burns energy with the movement of muscles. Low levels of physical activity, is linked to a high risk of non-communicable disease [1].
- Greater than one in three (35%) Jamaicans had low levels of physical activity [2].
- A higher proportion of females (44.9%) than males (24.2%) had low levels of physical activity [2]

Tobacco Smoking:

- Tobacco smoke contains a number of substances which are poisonous to the body. Nicotine found in tobacco is highly addictive and is linked to a higher risk of NCDs [1].
- About one in 6 (17.8%) Jamaicans reported currently smoking tobacco [2].
- Greater than one in four (28.3%) males compared with one in twelve females (8.3%) currently smoking tobacco [2].

Marijuana:

- Marijuana is also known as cannabis, ganja or weed and refers to the products of the *Cannabis sativa* plant. It contains tetrahydrocannabinols (THC) which affect different organs such as the brain, heart and lungs. Cannabis use is linked to social anxiety, depression, chronic bronchitis and schizophrenia. Its use is also linked to stroke and heart disease [3].
- About one in five (22.8%) Jamaicans reported currently smoking marijuana [2].
- About four in ten (35.8%) males currently smoked marijuana compared with one in ten (11.1%) females [2]

Sources:

1. Non-Communicable Disease and Injury Prevention and Control. Ministry of Health and Wellness. https://ncdip.moh.gov.jm/?s=hypertension
   Cannabis Health Effects. Cannabis and Public Health. CDC. https://www.cdc.gov/cannabis/health-effects/index.html
2. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).
3. Cannabis Health Effects. Cannabis and Public Health. CDC. https://www.cdc.gov/cannabis/health-effects/index.html

Proportion of Jamaicans with Selected NCDs and Risk Factors

NCDS and Risk Factors	Total (%)	Male (%)	Female (%)
Blood Pressure Categories			
Normal BP	34.1	34.6	33.7
Elevated BP	27.2	29.8	25.1
Hypertension	38.7	35.6	41.2
Body Mass Index (BMI) Categories			
Normal	37.3	54.3	23.7
Underweight	4.5	6.9	2.6
Overweight	25.0	21.9	27.6
Obese	33.1	16.9	46.2
High Waist Circumference	49.4	20.8	72.7
Physical Activity Categories			
Low	35.1	24.2	44.9
Moderate	20.1	17.2	22.6
High	44.8	58.6	32.5
Currently Smokes Tobacco	17.8	28.3	8.3
Currently Smokes Marijuana	22.8	35.8	11.1

1 High waist circumference is defined as a waist circumference > 94 cm in males and > 80 cm in females
2 A high waist to hip ratio is defined as >= 0.9 in males and >= 0.85 in females

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

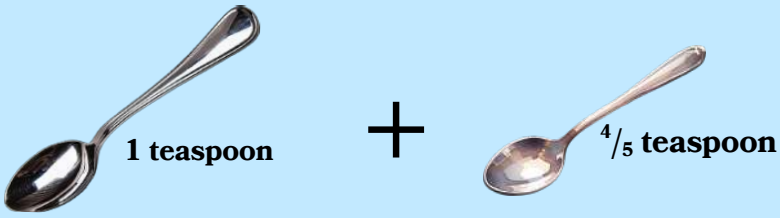
Findings from the Jamaica Salt Consumption Study

Sodium and Potassium Intake

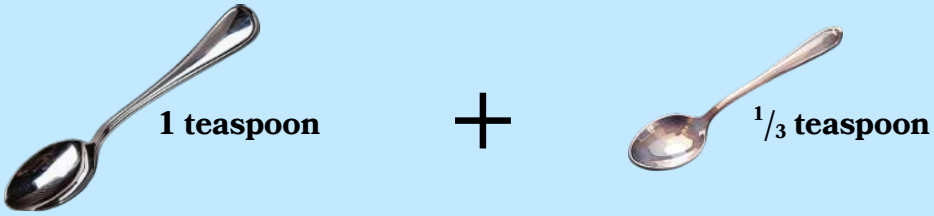
Salt Intake Based on Sodium in the Urine

The recommended intake of salt is 1 teaspoon (tsp) daily.

In 2017, Jamaicans consumed $1^{4}/_{5}$ teaspoons (tsp) of salt daily.
This exceeded the recommended intake by 80%.



The actual intake of salt in 2023 was $1^{1}/_{3}$ teaspoons (tsp) daily, exceeding the recommended intake by 35%.



Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Sodium and Potassium Intake

Potassium Intake Based on Potassium in the Urine (2023)

In 2017, the average potassium intake was 2,668 mg daily. This decreased to 2,282 mg of potassium in 2023.

2017

2,668 mg potassium

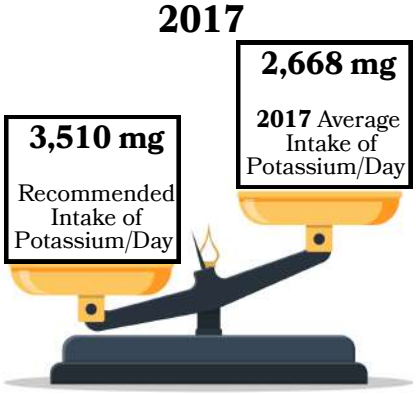
2023

2,282 mg potassium

The recommended potassium intake is 3,510 mg or more per day.

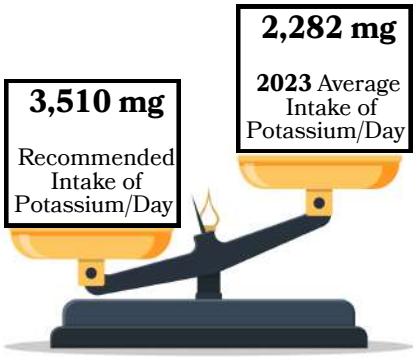
In both 2017 and 2023, the average potassium intake was below the recommended level.

2017



24% **below the recommended 3,510 mg per day**

2023



35% **below the recommended 3,510 mg per day**

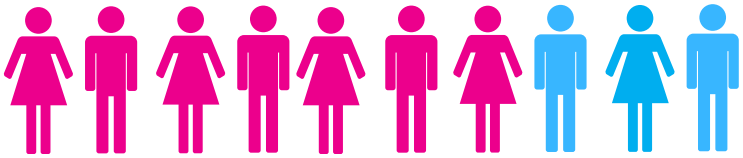
Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

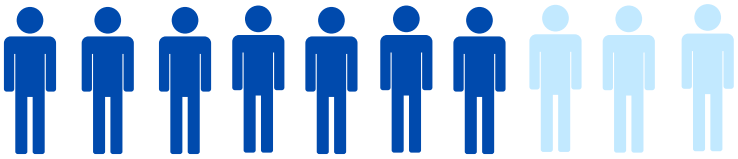
Sodium and Potassium Intake

Sodium Intake by Sex Based on Sodium in the Urine (2023)

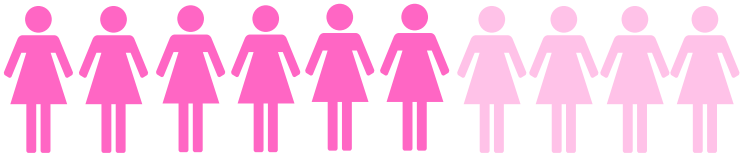
About **7** out of **10 (67.2%)** **Jamaicans** consumed more than the recommended intake of sodium



About **7** out of **10 (73.4%)** **Males** consumed more than the recommended intake of sodium



About **6** out of **10 (62.5%)** **Females** consumed more than the recommended intake of sodium



High sodium consumption was highest in the 18-34 year age group (71.3%) and gradually decreased with age to 42.4% in the 75 year and older age group.

Proportion (%) of High Sodium Consumption by Age (2023)

Age Group	18 - 34	35 - 54	55 - 74	≥ 75
Total	71.3%	70.4%	62.5%	42.4%

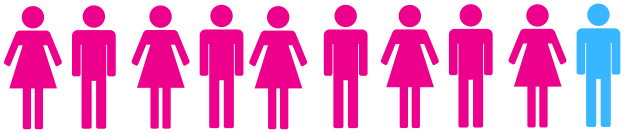
Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Sodium and Potassium Intake

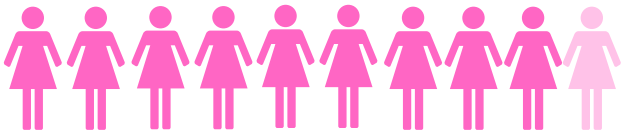
Potassium Intake by Sex Based on Potassium in the Urine (2023)

About **9** out of **10 (89.2%)** **Jamaicans** consumed less than the recommended intake of potassium



About **9** out of **10 (87.0%)** **Males** consumed less than the recommended intake of potassium

About **9** out of **10 (90.8%)** **Females** consumed less than the recommended intake of potassium



About 9 in 10 (92.2%) young adults aged 18–34 years did not consume enough potassium. Adults aged 55–74 years had the smallest proportion of people with low potassium intake (84.0%).

These results show that potassium intake increases with age, but many Jamaicans across all age groups still do not have enough.

Proportion (%) of Low Potassium Consumption by Age (2023)

Age Group	18 - 34	35 - 54	55 - 74	≥ 75
Total	92.2%	89.2%	84.0%	87.5%

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Sodium and Potassium Intake

Based on testing for sodium in urine samples, a similar proportion of persons living in urban and rural areas consumed high levels of sodium. However, persons in rural areas consumed more potassium (2,525 mg) than those in urban areas (2,190 mg). In general, most persons still had too little potassium.

Sodium Intake by Location Based on Sodium in the Urine (2023)

Rural		Urban
	=	
Rural Areas 68.6% consumed high levels of sodium		**Urban Areas** 66.6% consumed high levels of sodium

Potassium Intake by Location Based on Potassium in the Urine (2023)

Rural		Urban
	>	
Rural Areas 17% consumed enough potassium		**Urban Areas** 8.5% consumed enough potassium

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Knowledge, Attitudes and Practices

Knowledge of Common Sources of Salt

Most Jamaicans were aware that common sources of salt included:

Adding salt during cooking
(94.3%)

Eating salted meats or fish
(90.5%).

Using seasonings and sauces
(91.3%)

However, fewer persons recognised that major contributors to salt intake include:

Adding salt at the table
(37.0%)

Eating breads and baked products
(67.6%)

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Knowledge of Common Sources of Sodium

Jamaicans' Knowledge Regarding Common Sources of Salt in the Diet, 2023

The following table outlines Jamaicans' knowledge of common sources of salt as itemized in the Jamaica Salt Consumption Study

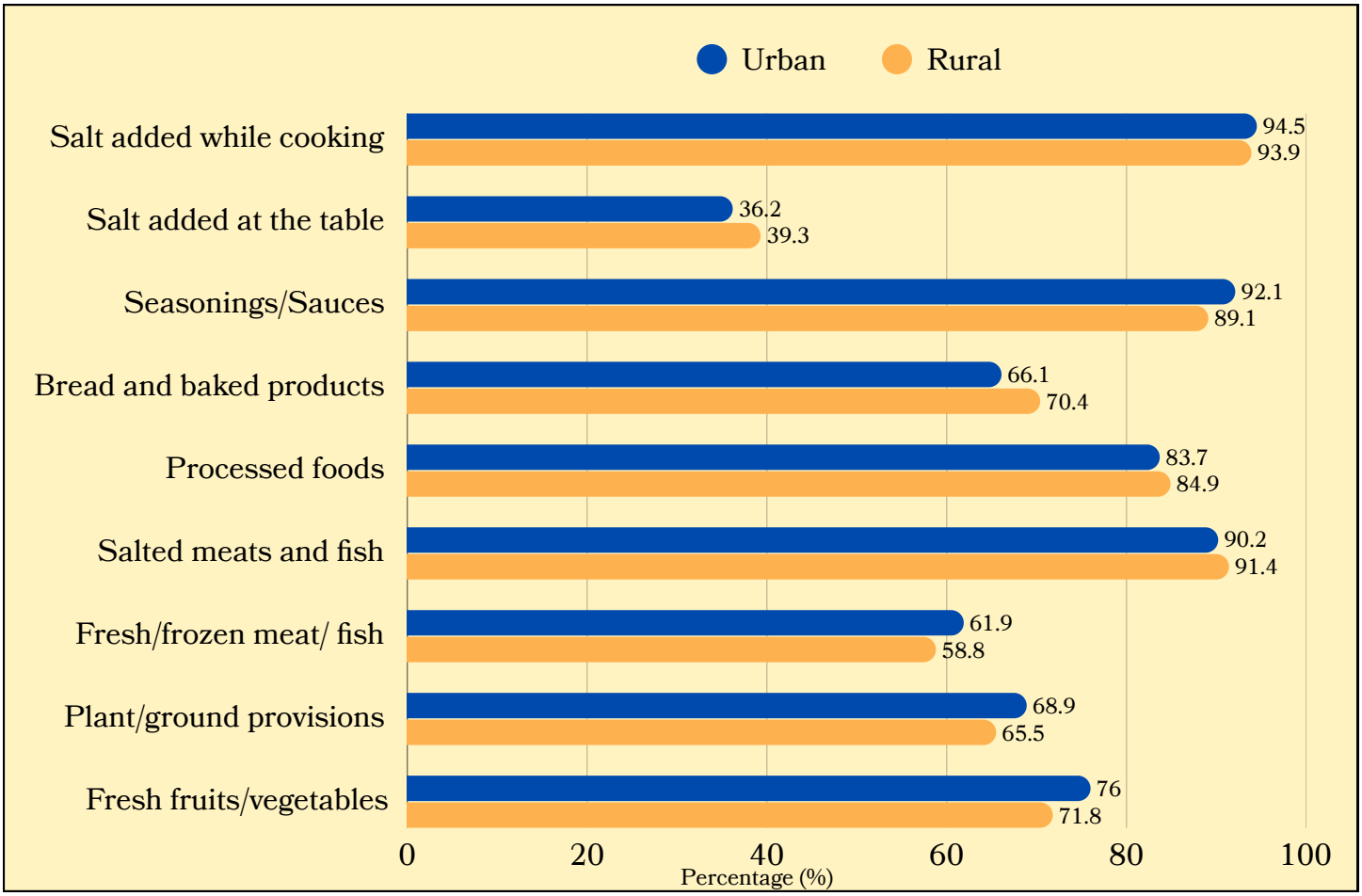
Source	Correct Answer		Answered Correctly (%)
	True	False	
Salt added while cooking	✓		94.3
Salt added at the table	✓		37.0
Seasonings/sauces	✓		91.3
Bread and baked products	✓		67.6
Processed foods	✓		84.0
Salted meats or fish	✓		90.5
Fresh/frozen meat/fish		✓	61.1
Plant/ground provisions		✓	68.7
Fresh fruits/vegetables		✓	74.9

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Knowledge of Common Sources of Salt

Similar proportions of urban and rural residents correctly identified common sources of salt in the diet. Almost all residents recognised salt added during cooking as a major source of dietary salt (urban 94.5%, rural 93.9%). More than eight in ten Jamaicans in both urban and rural areas also identified seasonings and sauces, processed foods, and salted meats and fish as sources of salt.

In both urban and rural settings, knowledge levels were lower for bread and baked products, plant and ground provisions, fresh or frozen meat and fish, and fresh fruits and vegetables. Knowledge was lowest for salt added at the table, with fewer than four in ten residents in both locations recognising this as a common source of dietary salt.

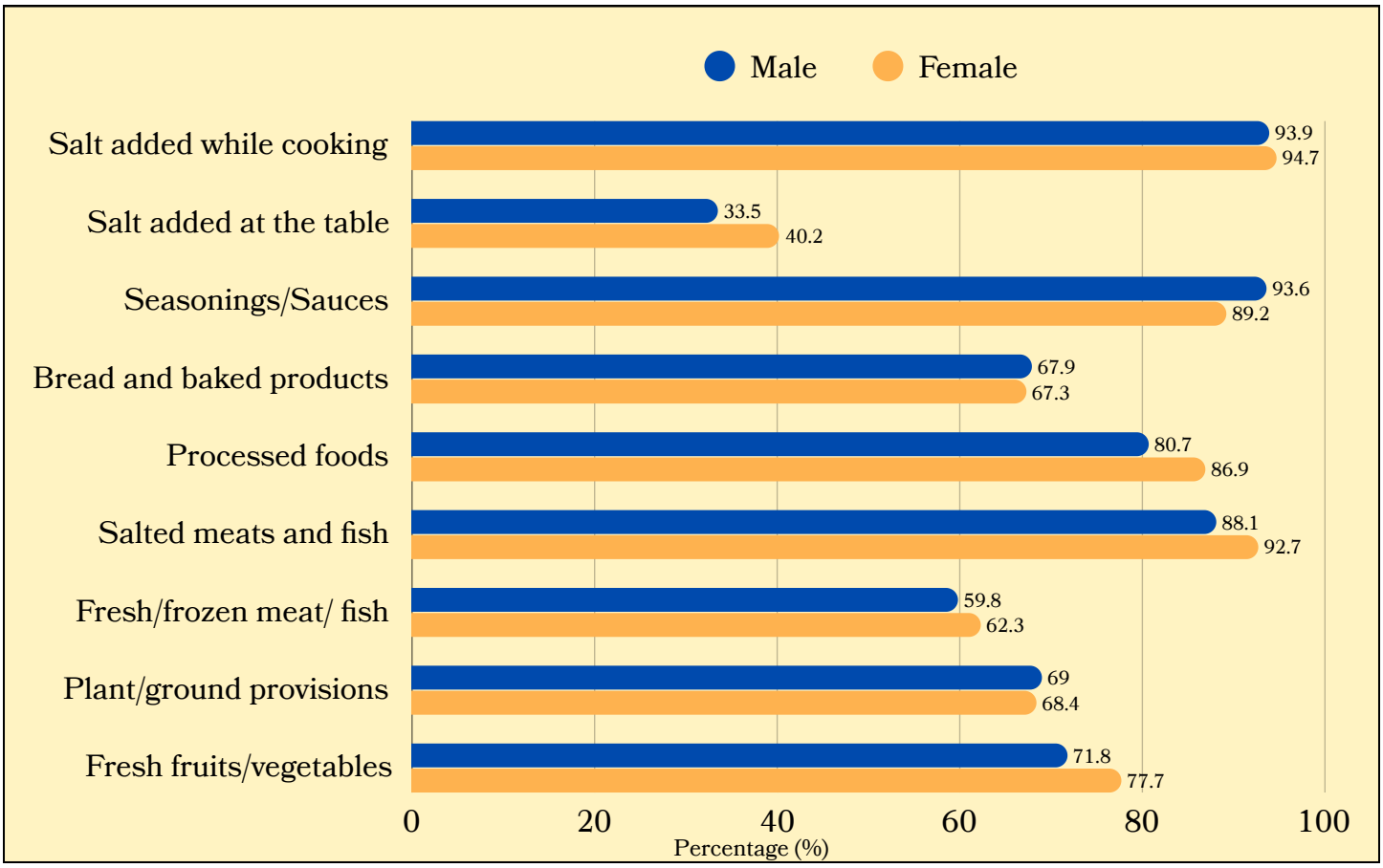


Percentage of Jamaicans with Correct Knowledge Regarding Sources of Salt in the Diet by Location

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Knowledge of Common Sources of Salt

- Generally, women had better knowledge of sources of salt in the diet compared to men. High knowledge levels were observed among both sexes for salt added during cooking, (male 93.9%, female 94.7%). A higher proportion of women than men recognised salt added at the table as a source of dietary salt (40.2% vs 33.5%).
- Knowledge of salt in seasonings and sauces was high for both groups, with higher proportion of men than women identifying this source (93.6% vs 89.2%). In contrast, higher proportions of women than men correctly identified processed foods (86.9% vs 80.7%) and salted meats and fish (92.7% vs 88.1%) as sources of salt.
- For other food categories, women consistently had higher levels of knowledge than men.



Percentage of Jamaicans with Correct Knowledge Regarding Sources of Salt in the Diet by Sex

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Knowledge, Attitudes and Practices

In general, young adults (18–34 years) were least likely to know common sources of salt for many categories. However, knowledge of seasonings/sauces, fresh/frozen meat/fish, plants/ground provisions and fresh fruits/vegetables was highest in this age group.

Percentage of Jamaicans with Correct Knowledge Regarding Common Sources of Salt in the Diet by Age Category

Salt Knowledge	Age Category (years)			
	18 - 34	35 - 54	55 - 74	> 75
Salt added while cooking	94.1	94.1	95.4	94.5
Salt added at the table	24.7	37.3	41.0	40.8
Seasonings/sauces	93.3	91.8	86.6	86.4
Bread and baked products	56.4	75.2	78.5	75.6
Processed foods	76.0	90.8	89.4	89.6
Salted meats or fish	86.6	93.5	92.5	97.2
Fresh/frozen meat/fish	61.0	62.2	60.0	58.6
Plant/ground provisions	69.6	68.5	69.4	60.2
Fresh fruits/vegetables	76.6	68.5	69.4	60.2

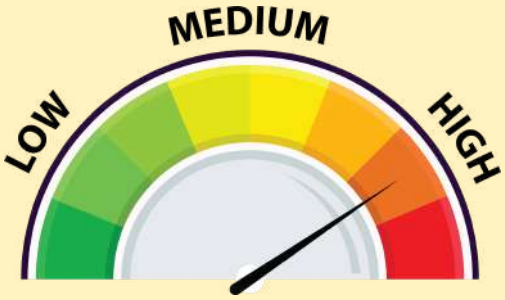
Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Knowledge, Attitudes and Practices

Salt and Health

Almost all (97.5%) persons knew that a high-salt diet poses serious health risks.



Low salt diet

RISK LEVEL

High salt diet

97.0% understood that salt can worsen high blood pressure.

94.1% recognised that reducing salt can improve health.

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Knowledge, Attitudes and Practices

Salt and Health

Many Jamaicans were aware of the harmful link between salt and stroke (75.0%) or heart disease (74.4%). However, fewer persons correctly identified the connection between excessive salt intake and conditions such as stomach cancer (49.0%), asthma (51.5%), osteoporosis (52.9%), and kidney disease (61.7%).

Jamaicans' Knowledge Regarding the effects of Salt on Health, 2023

Salt and Health	Correct Answer		Answered Correctly (%)
	True	False	
Can high salt in the diet cause a serious health issue?	✓		97.5
Can low salt diet result in significant improvement to health?	✓		94.1
Salt causes/worsens high blood pressure	✓		97.0
Salt causes/worsens diabetes mellitus	✓		58.7
Salt causes/worsens stomach cancer	✓		49.0
Salt causes/worsens kidney disease	✓		61.7
Salt causes/worsens asthma		✓	51.5
Salt causes/worsens stroke	✓		75.0
Salt causes/worsens heart attach/heart failure	✓		74.4
Salt causes/worsens osteoporosis	✓		52.9

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Salt and Health

Young adults were the least likely to know that too much salt can lead to diabetes, stroke, stomach cancer, kidney disease and heart disease.

Percentage of Jamaicans with Correct Knowledge Regarding Sources of Salt and Health by Age Group

Salt Knowledge	Age Category (years)			
	18 - 34	35 - 54	55 - 74	> 75
Can high salt in the diet cause a serious health issue?	96.6	99.0	97.4	96.6
Can low salt diet result in significant improvement to health?	92.9	94.2	96.0	96.6
Salt causes/worsens High Blood Pressure	96.6	96.8	98.2	97.8
Salt causes/worsens Diabetes Mellitus (sugar)	48.5	65.6	67.1	70.8
Salt causes/worsens stomach cancer	44.0	55.2	49.7	48.2
Salt causes/worsens kidney disease	53.5	68.1	70.3	61.4
Salt causes/worsens asthma	66.1	46.7	33.6	21.8
Salt causes/worsens stroke	60.6	86.1	86.2	85.9
Salt causes/worsens heart attack/heart failure	66.5	79.9	82.0	79.8
Salt causes/worsens osteoporosis	50.2	56.9	53.7	48.1

Stroke

Heart Disease

Asthma

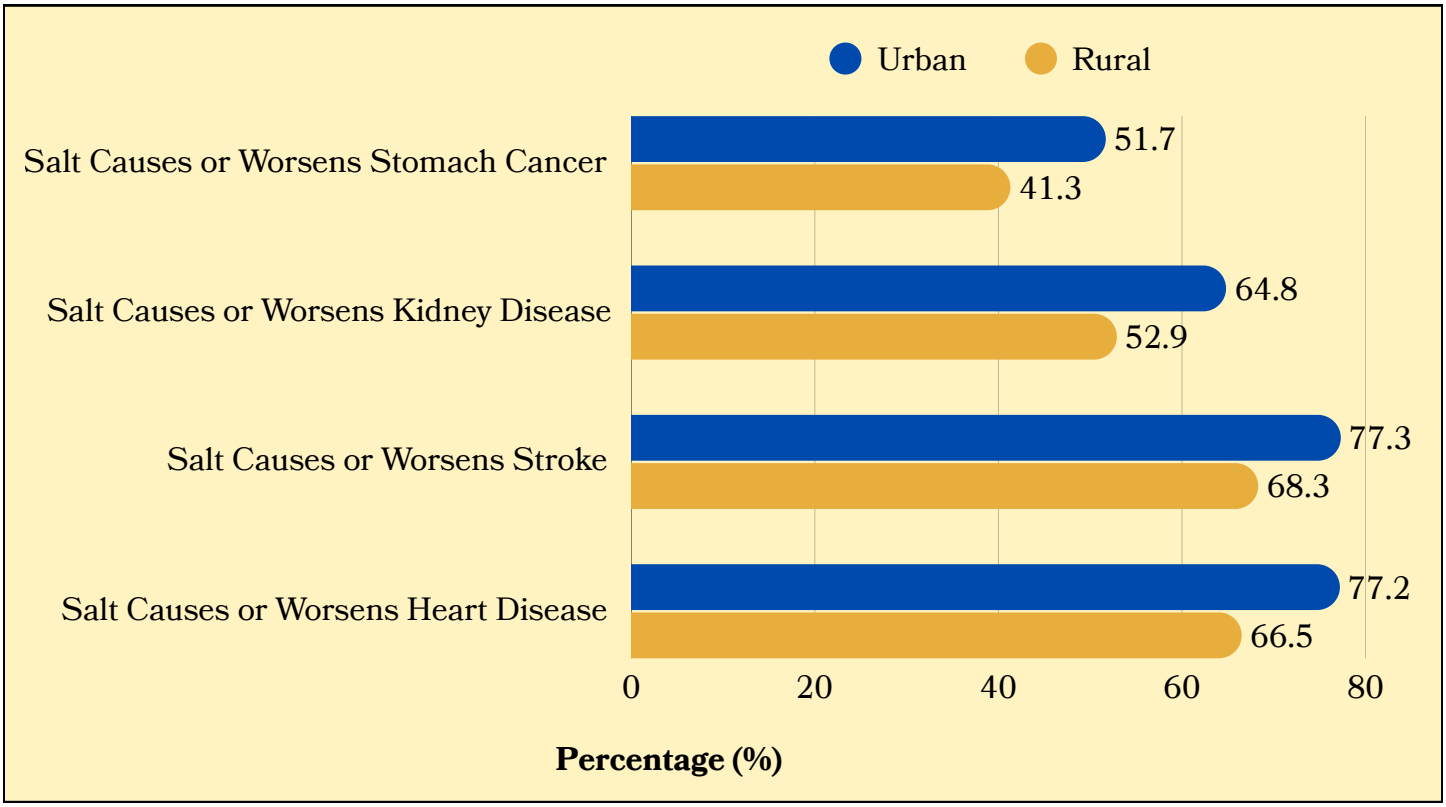
Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Knowledge of Common Sources of Salt

A higher proportion of urban than rural residents were aware of health conditions linked to high salt diet. About five in ten urban residents recognised that salt causes or worsens stomach cancer (51.7%), compared with 41.3% of rural residents.

Knowledge of the harmful effects of high salt intake on kidney disease was also higher among urban residents, with 64.8% correctly identifying this link, compared with 52.9% of rural participants.

Similarly, higher proportions of urban residents recognised that salt causes or worsens stroke (77.3% vs 68.3%) and heart disease (77.2% vs 66.5%).



Percentage of Jamaicans with Correct Knowledge Regarding Sources of Salt in the Diet by Geographic Area

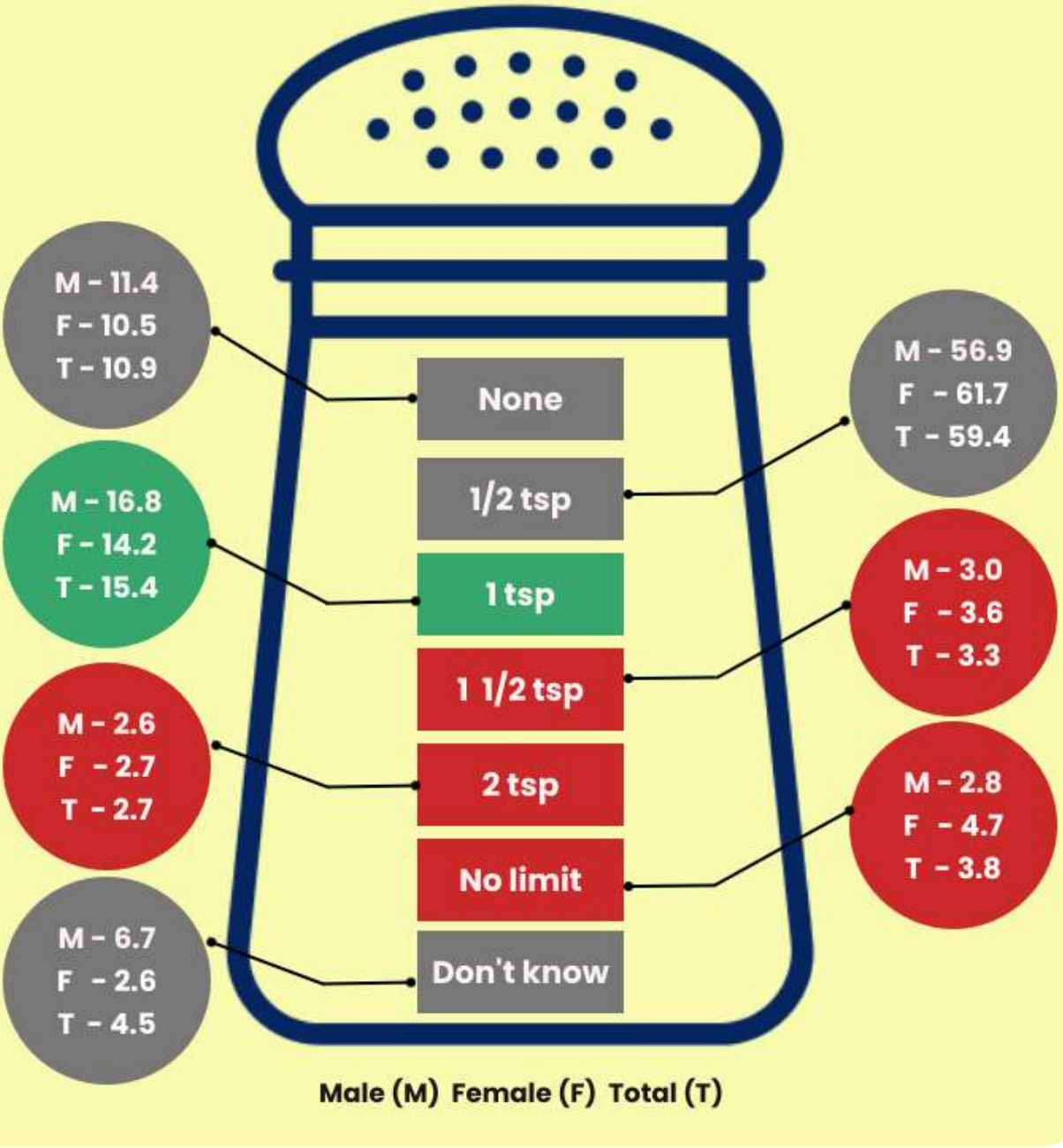
Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Knowledge, Attitudes and Practices

- Only 1 in 7 (15.4%) Jamaicans knew the recommended salt intake of 1 teaspoon daily.
- 1 in 25 (3.8%) Jamaicans said there was no limit to daily salt intake.
- Most individuals (59.4%) believed that half teaspoon was the correct daily intake.
- About 1 in 10 (10.9%) persons believed there was no recommended salt intake.

Jamaicans' Knowledge Regarding Recommended Salt Intake by Sex (%)



Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

National Perceptions of Salt Intake

About nine out of ten (87.2%) of participants believed that Jamaicans consumed too much (49.7%) or far too much (37.5%) salt.

National Perceptions of Salt Intake

Age Group	18 - 34	35 - 54	55 - 74	≥ 75
Far too little	0.0%	0.4%	0.7%	0.0%
Too little	0.8%	2.2%	4.0%	4.2%
Just the right amount	9.0%	7.2%	6.2%	7.7%
Too much	48.6%	48.7%	53.1%	52.4%
Far too much	40.1%	37.8%	32.5%	30.2%
Don't know	1.6%	3.6%	3.6%	5.6%

More rural than urban residents believed Jamaicans had "too much salt" (urban 48.5% vs rural 52.9%) while more urban than rural residents believed Jamaicans had "far too much salt" (urban 38.9% vs rural 30.9%).

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Personal Perceptions of Salt Intake

Most age groups believed that they had very little or just the right amount of salt. When broken down by age groups, persons aged 18 - 34 years had the largest proportions of persons (28.9%) who believe that Jamaicans consume far too much salt.

The older age groups believed that they had very little salt while the younger age groups believed they had just the right amount of salt

Personal Perceptions of Salt Intake

Age Group	18 - 34	35 - 54	55 - 74	≥ 75
Very little	23.3%	33.6%	63.0%	58.2%
Just the right amount	45.5%	51.0%	30.8%	29.3%
Too much	28.9%	14.1%	5.1%	10.0%
Far too much	2.3%	1.3%	1.2%	2.5%

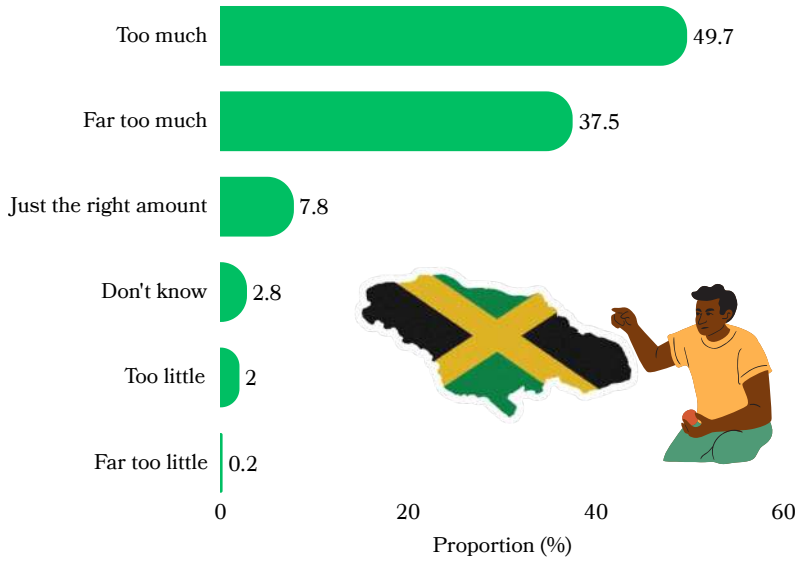
More participants in rural areas believed they consumed very little salt (rural 41.4% vs. urban 33.4%). However, more urban residents believed they consumed too much salt (urban 20.8% vs. rural 13.3%)

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Knowledge, Attitudes and Practices

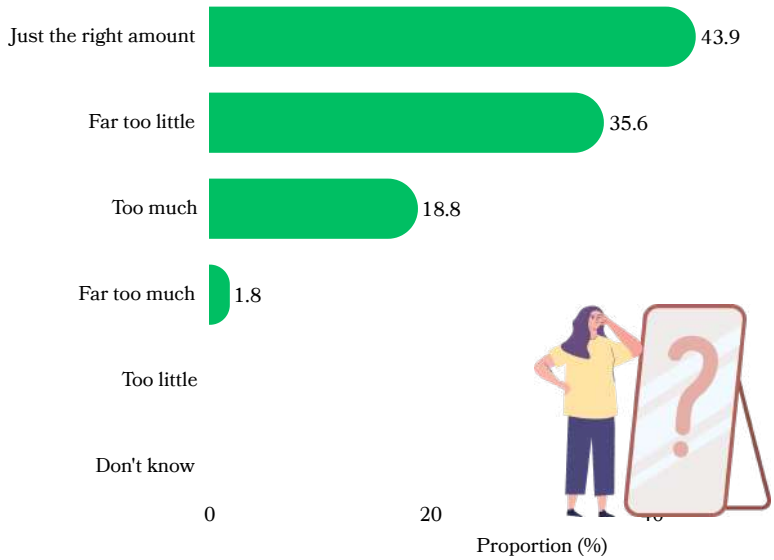
Jamaican Perceptions of Salt Intake by Other Jamaicans



National Perception:

- About 1 in 2 (49.7%) persons believed that Jamaicans consumed too much salt.
- About 4 in 10 (37.5%) believed that salt intake was far too high.

Jamaican Perceptions of their Personal Salt Intake



Personal Perception:

- 43.9% believed they consumed just the right amount of salt, while almost 4 in 10 (35.6%) thought they consumed far too little.
- Only 1 in 5 (18.8%) believed they ate too much salt, and very few (1.8%) believed they ate far too much.

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Knowledge Scores

Participants were asked questions about salt and how salt affects health. Researchers gave a score based on the number of correct answers.

Score 1: Measured participants' understanding of salt and health.
Score 2: Measured what they knew about salt in different foods.

- About 70% of participants had a good understanding of salt and health.
- The average score was 65% for knowledge of salt in foods with 66% of females and 64% of males answering correctly.
- When both scores were combined, about two-thirds of participants answered correctly.

Salt Knowledge Scores by Sex

Knowledge Scores	Male Average	Female Average	Total Average
Knowledge Score 1 (Participants' understanding of salt and its effect on health)	69.3%	69.9%	69.6%
Knowledge Score 2 (Participants' knowledge of the salt content of foods)	64.1%	66.1%	65.2%
Knowledge Score Combined	66.8%	68.1%	67.5%

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Knowledge Scores

Knowledge scores varied by age group. Persons aged 35–54 years had the highest scores (69.7%), while those 75 years and older had the lowest (61.8%).

Percentage of Jamaicans with Knowledge Scores of Salt by Age Group

Knowledge Scores	Age Category (years)			
	18 - 34	35 - 54	55 - 74	> 75
Knowledge Score 1 *(participants' understanding of salt and its effect on health)*	67.0	72.0	71.5	69.0
Knowledge Score 1 *(participants' knowledge of the salt content of foods)*	65.8	67.4	62.1	54.1
Knowledge Score Combined	66.7	69.7	66.9	61.8

There was no statistical difference in Knowledge Score 1 by geographical area. However, urban residents had slightly higher scores for Knowledge Score 2 (urban 66.3% vs. rural 61.6%) and the combined knowledge score (urban 68.2% vs. rural 65.1%).

Percentage of Jamaicans with Knowledge Scores of Salt by Location

Knowledge Scores	Location	
	Urban	Rural
Knowledge Score 1 *(participants' understanding of salt and its effect on health)*	70.0	68.0
Knowledge Score 1 *(participants' knowledge of the salt content of foods)*	66.3	61.6
Knowledge Score Combined	68.2	65.1

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Salt in Restaurant Foods

Introduction

According to the WHO, cultural factors and dietary habits of a population are main contributors to sodium consumption[1]. Population-based approaches may be needed to reduce salt consumption, as a large proportion of dietary salt intake comes from processed foods and foods prepared outside the home[2,3,4.] The food industry plays a critical role in the intake of healthy or unhealthy foods and is therefore included in the WHO SHAKE Package for Salt Reduction[3]. One key strategy in this package is to harness industry to change the ingredients of foods to contain less salt[3].

The Jamaica Salt Consumption Study sought to obtain the sodium content of restaurant foods. The specific study objective that addressed this section was to:

- Assess the use of sodium in the preparation of restaurant foods, and
- Estimate the sodium content in restaurant foods[2]

Researchers identified twenty-nine chain restaurants (those with three or more branches). Of these, seven (7) agreed to participate in the study. The following summarises the methodology as well as selected study findings obtained from this part of the study:

Which Restaurants Were Used and How Were They Selected?

The research team created a list of all food establishments registered to sell food in Jamaica. Selection was done using listings from either the yellow pages of the telephone directory or the Companies Office of Jamaica. The process helped to identify the restaurants from which the sample was drawn.

Sources:

1. Sodium Reduction. World Health Organization. Accessed December 23, 2025. https://www.who.int/news-room/fact-sheets/detail/sodium-reduction
2. Ferguson TS, Bennett NR, McNeil S, Younger-Coleman N, Webster-Kerr K, Tulloch-Reid M, Davidson T, Grant A, Soares-Wynter S, McKenzie J, Walker E, Anderson S, Spence S. The Jamaica Salt Consumption Study: Sodium Intake; Sodium Content in Restaurant Foods; Knowledge, Attitudes and Practices; Spot Urine Sodium Validation. March, 2025. Caribbean Institute for Health Research, University of the West Indies and the Ministry of Health and Welness Jamaica
3. World Health Organization. The SHAKE Technical Package for Salt Reduction. Geneva, Switzerland: World Health Organization; 2016.
4. Pan American Health Organization. Preventing Cardiovascular Disease in the Americas by Reducing Dietary Salt Intake Population-Wide. 2009
5. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Salt in Restaurant Foods

Why Was it Important to Interview the Owners/Managers of the Restaurants?

It was important to interview the owners/managers because the research team wanted to find out how much salt was used in the foods they prepared. All the restaurants were international restaurants with branches or locations in Jamaica.

How Many Restaurants Were Selected and How Many Menu Items Were Used?

Six (6) restaurants and 151 menu items were used in the study.

Did the Restaurants Share Recipes that Indicate How Much Salt Was Used to Prepare Food?

None of the restaurants shared recipes indicating how much salt was used in the preparation of food. The research team used information from the Food Data Central Database which is owned by the United States Department of Agriculture (USDA). This database allowed the research team to determine the quantity of salt in each menu item.

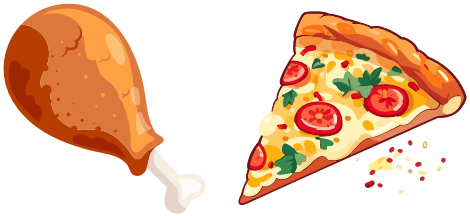
Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Salt in Restaurant Foods

How Were the Foods Categorised?

Foods were placed into different categories such as burgers, fries, chicken, chicken preparations, fish preparations, pizza and side orders. Members of the research team estimated the average salt content per 100g in each food item. Eighty-one (81) menu items were matched to the USDA Food Data Central Database. Researchers used this information to determine the quantity of salt in each food item.



How Many Types of Food Were in Each Category?

Pizza (26), fried chicken (20), side orders (11) and hamburgers (6).

What Were The Different Side Orders?

Side orders included food items such as cookies, breadsticks, onion rings, mashed potatoes, French toast sticks, coleslaw, chili and biscuits.

Which Categories of Food Had The Highest Amount of Salt?

All items (100%) in some food categories (chicken sandwich, fish sandwich/fillet, hamburgers and potatoes) were high in sodium.

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

Findings from the Jamaica Salt Consumption Study

Salt in Restaurant Foods

Percent of Restaurant Foods With High Amounts of Salt

Fried Chicken (90.9%)

Eggs (50.0%)

Fish Sandwich (100.0%)

Fish fillet (100.0%)

Chicken Sandwich (100.0%)

Hamburger (100.0%)

Potato preparations (fries, hashbrowns etc.) (100.0%)

Side orders (83.3%)

All restaurant foods (89.7%)

High sodium ≥ 1 mg/kcal

Source:
1. Ferguson TS et. al. The Jamaica Salt Consumption Study. CAIHR, UWI and MOHW (unpublished).

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Eat more fruits and vegetables daily.

MINISTRY OF HEALTH & WELLNESS

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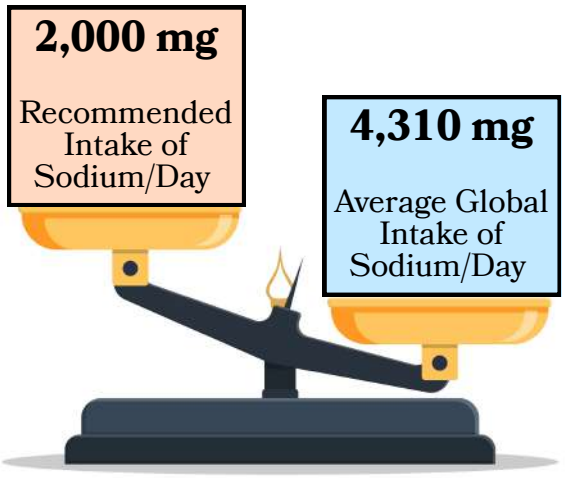
The Response

The Response

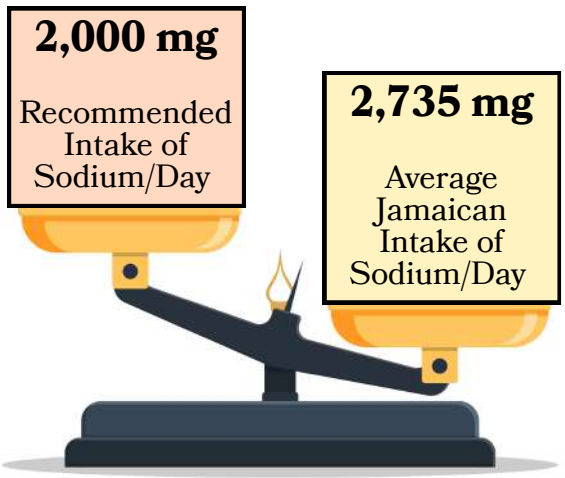
The Need for Sodium Reduction Strategies

The Jamaica Salt Consumption Study contributes information on the average intake of sodium in the Jamaican population. The WHO has reported that almost all populations are consuming too much sodium, with an average intake of 4,310 mg/day per adult worldwide[1]. The sodium intake of 2,735 mg/day in Jamaica is less than the global average[2]. However, it is 36% greater than the recommended sodium intake of 2,000 mg/day[1]. High sodium consumption is linked to high blood pressure, heart disease, gastric cancer and kidney disease. These conditions may lead to premature death. The question, therefore, is what can be done to reduce sodium intake in the Jamaican population?

Average Global Sodium Intake vs Recommended Sodium Intake



Average Jamaican Sodium Intake vs Recommended Sodium Intake



Sources:

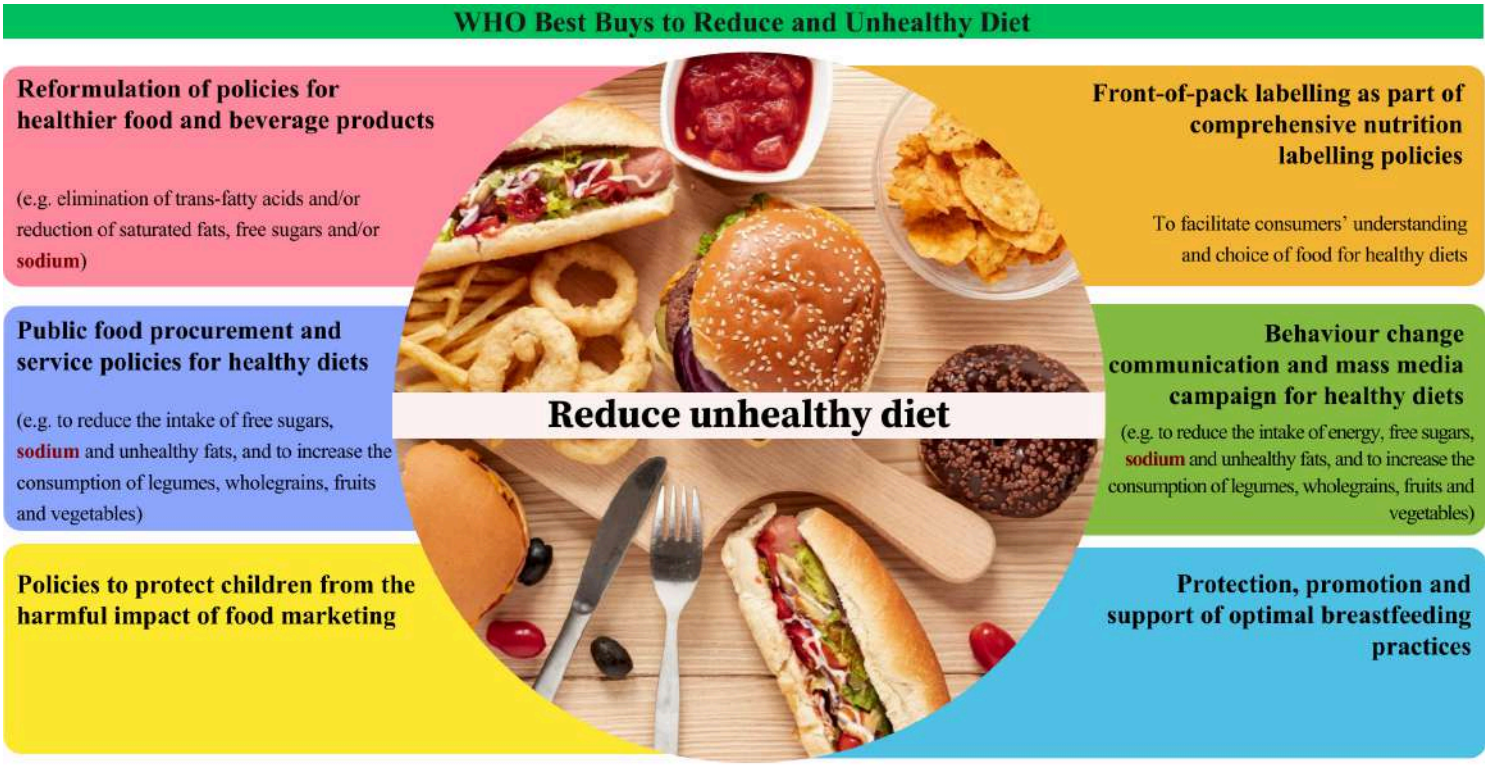
1. Sodium Reduction. World Health Organization. Accessed December 23, 2025. https://www.who.int/news-room/fact-sheets/detail/sodium-reduction
2. Ferguson TS, Bennett NR, McNeil S, Younger-Coleman N, Webster-Kerr K, Tulloch-Reid M, Davidson T, Grant A, Soares-Wynter S, McKenzie J, Walker E, Anderson S, Spence S. The Jamaica Salt Consumption Study: Sodium Intake; Sodium Content in Restaurant Foods; Knowledge, Attitudes and Practices; Spot Urine Sodium Validation. March, 2025. Caribbean Institute for Health Research, University of the West Indies and the Ministry of Health and Welness Jamaica

The Response

The Need for Sodium Reduction Strategies

It has been shown that reducing sodium intake in the population is one of the most cost-effective ways to reduce the toll of NCDs. The WHO has identified a set of evidence-based 'best buy' interventions that are affordable, cost-effective, feasible and appropriate for implementation in low to middle-income countries. The primary benefit of these investments is a reduction in premature death due to NCDs[1]. Of the total WHO Best Buy interventions, four focus on sodium reduction. These include a reduction in salt intake through:

- **Reformulation of food products** to contain less salt and setting target levels for the amount of salt in foods and meals.
- **Establishment of a supportive environment in public institutions** such as hospitals, schools, workplaces, and nursing homes, to enable lower sodium options.
- **Behaviour change communication and mass media campaign.**
- **Front-of-pack labeling**.[2]



Source: World Health Organization - Noncommunicable Diseases (NCD) Country Profiles, 2018

The following pages will outline efforts at the global, regional and local level to reduce sodium consumption.

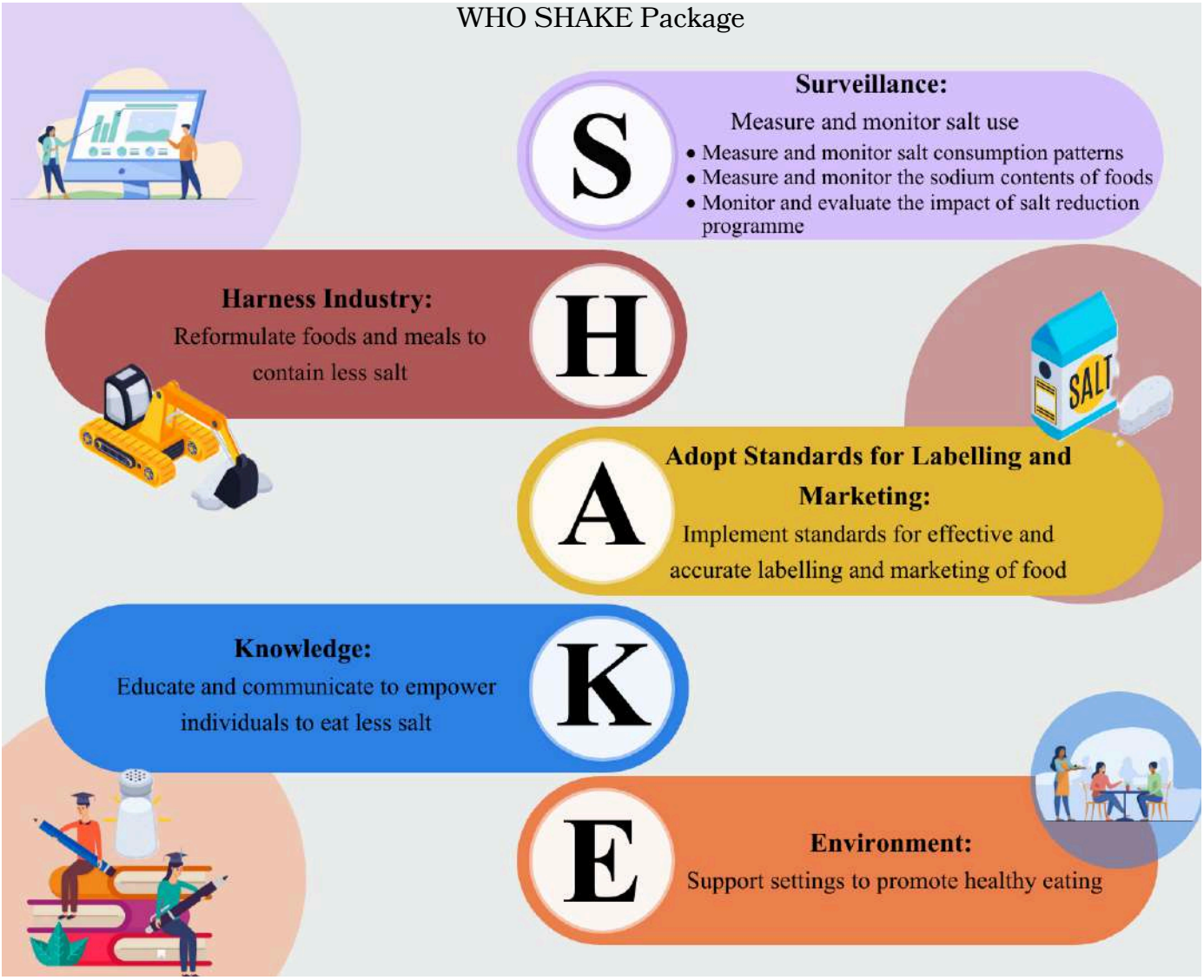
Sources:

1. World Economic Forum/World Health Organiztion. From Burden to "Best Buys": Reducing the Economic Impact of Non-Communicable Diseases in Low- and Middle-Income Countries 2011.
2. PAHO. Salt/Sodium Intake Reduction Policies. https://www.paho.org/en/noncommunicable-diseases-and-mental-health/noncommunicable-diseases-and-mental-health-data-29#:~:text=Aligned%20with%20WHO%20Global%20Action,per%20day%20(2%20grams%20of

The WHO SHAKE Package for Salt Reduction

The Jamaica Salt Consumption Study has shown that Jamaicans have high levels of sodium consumption while the foods served in local restaurants have high amounts of sodium. In order to address this issue a national salt reduction programme will require an 'all of government, all of society' response. Key steps of the response are outlined in the World Health Organization (WHO) SHAKE Package for Salt Reduction. This was designed to assist WHO Member States to develop, conduct and monitor salt reduction strategies in order to achieve a reduction in sodium consumption levels. The SHAKE acronym is based on key areas for action as outlined in the figure below. Findings of the Jamaica Salt Consumption Study address or provides data on core areas of the package[1].

WHO SHAKE Package



Source:

1. World Health Organization. The SHAKE Technical Package for Salt Reduction. 2016. Accessed December 16, 2025 https://www.who.int/publications/i/item/WHO-NMH-PND-16.4 .

CARPHA's Regional Sodium Reduction Framework: CESA

CARPHA's Regional Framework for the reduction of sodium intake in populations has four overarching components:

- **C**hange the Food Environment: Policy and legislation
- **E**ducate the Population: Communication and advocacy
- **S**trengthen Systems Capacity: Monitoring, evaluation and research
- **A**ssess Progress: Surveillance

The framework was adapted from the WHO SHAKE technical package to be used by CARICOM member states[1].

Change the Food Environment

This refers to creating supportive environments to facilitate positive behaviour change in the population. This focuses on approaches to reduce salt intake and include:

- Front-of-package labelling
- Nutrition facts panels
- Nutrition standards
- Changing the formulas of food[1]

Educate the Population

Education helps to increase knowledge and awareness of the population, enable them to make the right food choices and reduce sodium consumption. The framework focuses on:

- Educating persons on food labels including front-of-package labelling
- Adding information on sodium to the school curricula
- Distribution of sodium spoons throughout the population[1].

Source:
1. CARPHA/CARICOM. Regional Framework for Sodium Reduction in Populations. 2020 March.

Strengthen Systems Capacity

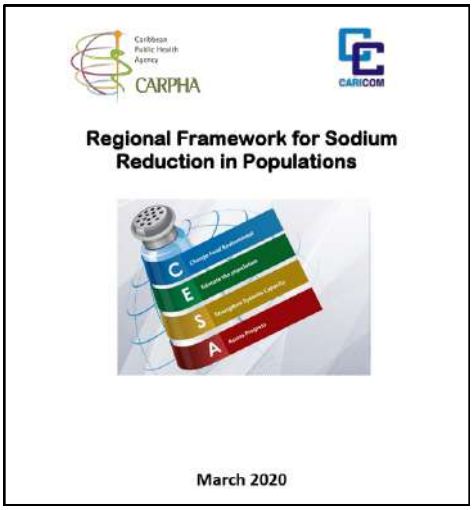
This involves enhancing existing resources, infrastructure, legislation, standards and protocols to address sodium reduction. This framework includes:

- Partnering with different sectors to strengthen systems for sodium reduction
- Providing adequate resources for sodium reduction[1]

Assess Progress

Assessing progress requires detailed monitoring of chronic diseases linked to high levels of sodium intake. A key component involves disease surveillance, as well as, the creation of a comprehensive NCD registry to track all new and existing cases of sodium-related health conditions including:

- High blood pressure
- Stroke
- Heart disease
- Kidney disease
- Osteoporosis
- Stomach cancer[1]



Source:

1. CARPHA/CARICOM. Regional Framework for Sodium Reduction in Populations. 2020 March.

The Response

National Response

The National Response is guided by 2007 National Policy for the Promotion of Healthy Lifestyles in Jamaica 2007 and strategies to reduce salt consumption through the Health Lifestyle Project. This was followed by the National Strategic and Action Plan for the Prevention and Control of NCDs in Jamaica 2013 to 2018 created the framework for sodium reduction, now the Draft Plan 2026 and 2036 a continuation of this plan.

This is the policy framework for the National Response. CARPHA in collaboration with Jamaica among other Caribbean countries developed the Regional document CESA to guide regional sodium reduction initiatives. There have been several public education campaigns since 2008 to increase public awareness aimed at reducing sodium consumption.

Sodium reduction strategies for Jamaica are guided by the National Strategic and Action Plan for the Prevention and Control of NCDs. The 2026 to 2036 Action Plan builds on initiatives outlines in the 2013 to 2018 Action Plan. Please see figure below which outlines sodium reduction strategies contained in both action plans.

National Strategic and Action Plan 2013 to 2018

Target: 10% reduction in the mean population intake of salt by 2018

Objective: Promotion of Healthy Diets.

Some Key Actions:

- Measure salt intake on a sub-sample of persons from the national health survey in 2012 and 2017
- Public education campaign to reduce salt used in cooking, adding salt at the table and consumption of high salt processed foods
- Partner with food industry, restaurants, cook-shops and trade organizations to reduce the salt content of food prepared outside the home.

Objective: Passage of policies/legislation to promote healthy eating.

Some Key Actions:

- Establishment of a multi-sector task force to develop policy document
- Work with Minister of Health to have the National Infant and Young Child feeding policy passed
- Complete and implement National Food-based dietary guidelines.

National Strategic and Action Plan 2026 to 2036 (Proposed)
Lead Target: Mean population intake of salt/sodium (g) of 5 mg by 2036

Specific Objectives 3.2: To promote healthy eating for health and well-being.

Outcomes:

- Increased capacity to read nutritional food labels.
- Daily consumption of high salt / sodium foods reduced.
- Daily consumption of fruits and vegetables increased
- Healthy infant feeding promoted.

Specific Objectives 3.9: To promote healthy eating and active living in health-promoting settings through continued support for community and population-based initiatives.

Outcomes:

- Healthy eating and active living promoted in schools
- Curriculum revision at primary, secondary and tertiary levels to include NCDs and their risk factors
- Healthy eating promoted in Workplaces, faith-based organisations (FBOs), hospitals and other public institutions.

The Response

National Response

The following are some of the strategies being carried out by the Ministry of Health and Wellness regarding sodium reduction.

Strategies	Implementation Deadline	Progress
Jamaica Moves In Schools: Survey Of Healthy Eating School Environment (2025) The objective of the survey was to assess the schools readiness to adapt the National School Nutrition Policy. Two Surveys were conducted in a total of 204 schools using an Audit Tool that collected data from Canteens, Tuck Shops and Vendors re sodium content of foods that are available to students for sale on the school compound and the surrounding perimeter.	2026	Survey conducted in 2025, data analysis completed and preliminary report submitted for review
Implementation of the Front of Package Labelling (FOPL): • Joint Working Group (JWG) established with Ministry of Investment, Industry and Commerce (MIIC). • Development and implementation of public education campaign to educate Jamaicans on FOPL that will highlight key nutrients such as sodium, sugars, saturated fats and Trans fats.	2023 2026	The JWG established a Terms of Reference and workplan. Meetings have been conducted between MIIC and MOHW. Procurement for the Consultant to develop the Public Education Campaign has commenced. Development of the Public Education Campaign is expected to end in June 2026.

Source:

1. Nutrition Unit. Ministry of Health and Wellness. Jamaica

The Response

National Response

Strategies	Implementation Deadline	Progress
Launch and implementation of the Nutrition Facts Panel Media Campaign: This focuses to reducing intake of foods that have a sodium level that is more than 5% of the recommended daily value.	2023	The Campaign was launched in July 2023, followed by: • Placement of a jingle and video on popular radio and television stations. • Development and placement of social media cards on social media platforms for the MOHW and partners. • Development and placement of posters and banners in schools and health centres.
Implementation of the Salt Reduction Education Campaign		The Campaign was implemented in 2023 and is ongoing. Information has been distributed on various media platforms including: • Social media • Brochures • Billboards: Placed in Clarendon, St Elizabeth, St Andrew, St Catherine and Manchester The MOHW is partnering with the JCDC to develop a video targeting children/young adults. Capacity building sessions were conducted with healthcare workers such as nurses, doctors, community health aids, dietitians, nutritionists and health promotion and education officers.

Source:

1. Nutrition Unit. Ministry of Health and Wellness. Jamaica

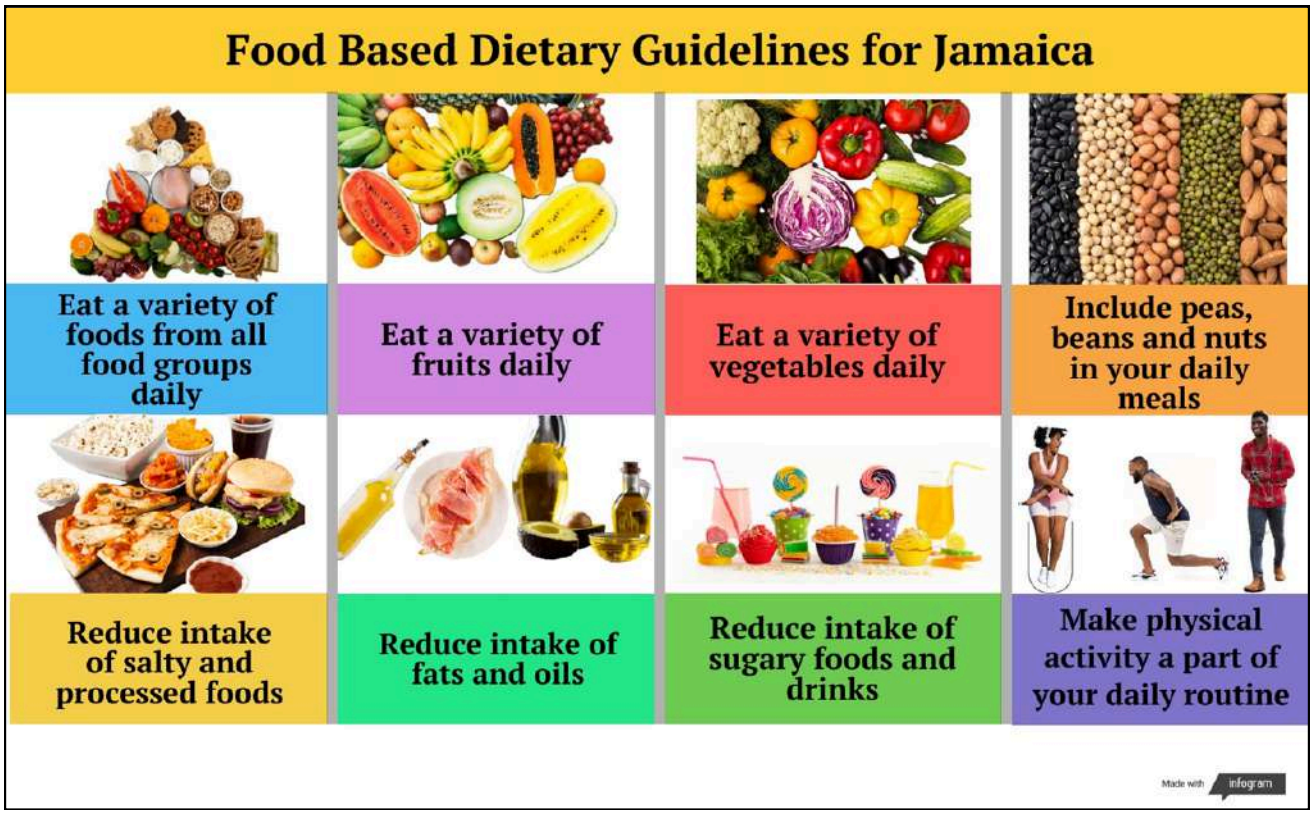
Dietary Ideal: Food Based Dietary Guidelines for Jamaica

In Jamaica, there is a standard for a healthy diet that promotes dietary ideals. The MOHW has published the Food Based Dietary Guidelines to help combat the double burden of under and over nutrition. The guidelines help the population aged two years and older make healthy food choices.

Source:

1. Ministry of Health and Wellness. Food Based Dietary Guidelines. Ministry of Health and Wellness. Accessed December 13, 2025. https://www.moh.gov.jm/programmes-policies/food-based-dietary-guidelines/

Dietary Ideal: Food Based Dietary Guidelines for Jamaica



Reduce Intake of Salty or processed Foods

Characteristics	Benefits	Useful Tips
• This includes food with very high amounts of sodium such as sausages, bacon, ham, salted peanuts and canned foods such as sardines in brine	• Improves health and wellbeing • Helps to prevent and control high blood pressure, heart disease and some cancers	• Prepare foods with less salt and artificial seasonings • Avoid using salt at the table • Replace salty snacks with fruits, vegetables and unsalted nuts • Read food labels, look carefully at the sodium content and choose foods with less sodium

Source:

1. Ministry of Health and Wellness. Food Based Dietary Guidelines. Ministry of Health and Wellness. Accessed December 13, 2025. https://www.moh.gov.jm/programmes-policies/food-based-dietary-guidelines/

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  - INFORMATION SYSTEMS FOR HEALTH

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  - HEALTH SERVICES SUPPORT & MONITORING UNIT
  - ADOLESCENT HEALTH UNIT
  - MENTAL HEALTH UNIT
  - HEALTH SYSTEMS IMPROVEMENT BRANCH

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- HEALTH INFRASTRUCTURE PLANNING & PROJECT MANAGEMENT DIVISION
- OFFICE OF THE PRINCIPAL DIRECTOR, CORPORATE SERVICES
- GENERAL ADMINISTRATION BRANCH
- OFFICE OF THE CHIEF PROGRAMME OFFICER

40 KNUTSFORD BOULEVARD, KINGSTON 5

- HUMAN RESOURCE MANAGEMENT, DEVELOPMENT & ADMINISTRATION

THE NEW ARC BUILDING
15 KNUTSFORD BOULEVARD, KINGSTON 5

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  - HEALTH STATUS MONITORING UNIT
- ENVIRONMENTAL HEALTH UNIT
- VETERINARY PUBLIC HEALTH UNIT

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- STANDARDS AND REGULATION DIVISION
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- JAMAICA/CUBA EYE-CARE PROGRAMME OFFICE
- PESTICIDE CONTROL AUTHORITY
- TRANSPORT & SECURITY UNIT

NATIONAL PUBLIC HEALTH LABORATORY
NATIONAL BLOOD TRANFUSION SERVICES
1 SLIPE PEN ROAD, KINGSTON
876-967-2234

IBM BUILDING
52 KNUTSFORD BOULEVARD, KINGSTON 5

- EMERGENCY, DISASTER MANAGEMENT & SPECIAL SERVICES BRANCH
- EMERGENCY OPERATIONS CENTRE

ENABLING ENVIRONMENT IN HEALTH & CLIENT SERVICES DIVISION
5 SYLVAN AVENUE, KINGSTON 10

MINISTRY OF HEALTH & WELLNESS

NATIONAL EPIDEMIOLOGY BRANCH