**Front Cover**

Title: The Basics of Sodium and Health  
Subtitle: A Simple Guide to Managing Sodium for Better Health

Image Suggestion: A welcoming, colourful cover image featuring a saltshaker alongside fresh vegetables, symbolising a balanced approach to sodium and healthy eating. The image should convey positivity and simplicity, setting an inviting tone.

**Preface**

We are pleased to introduce *The Basics of Sodium and Health*, *a simple yet comprehensive guide to managing sodium intake.* This booklet is designed to provide clear, essential information on sodium’s role in the body, recommended limits, and practical ways to cut back. You will learn how to spot hidden sodium sources, read food labels effectively, and explore flavourful alternatives to salt. We hope this guide helps you make balanced, informed choices every day.

**About the Author**

Jesse Enebi Usman is a dedicated advocate for health education and equity, with a deep commitment to making healthcare information accessible and impactful. This booklet, developed as part of his doctoral studies at Sheffield Hallam University, reflects Jesse’s focus on improving health outcomes and advancing equitable healthcare access, especially for underserved communities.

**Acknowledgments**

Special thanks to Sheffield Hallam University for supporting Jesse’s PhD research, which made this project possible. Sincere gratitude to Professor Markos Klonizakis, Professor Charmaine Childs, and Dr. David Rogerson for their mentorship and encouragement.

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**Glossary of Terms**

**Sodium**: A mineral essential for body functions like fluid balance, nerve function, and muscle movement.

**Electrolyte**: A substance that carries an electric charge, essential for functions like muscle movement and fluid balance.

**Processed Foods**: Foods that have been altered from their natural state, often containing added sodium for flavor or preservation.

**Low-Sodium Label**: A designation on food packaging indicating reduced sodium content, useful for managing salt intake.

**Hypertension**: Another term for high blood pressure, which can be affected by sodium intake.

**Hidden Sodium**: Sodium added to processed foods that may not be immediately noticeable, often present in items like sauces, bread, and snack foods.

Section 1: What is Sodium?

**Objective**

To understand what sodium is, why it’s essential, and the difference between sodium and salt.

**What is Sodium?**

Sodium is a mineral that keeps our bodies functioning well. Combined with chlorine, it forms table salt, also called sodium chloride. Sodium is known as an “electrolyte” because it helps transmit electrical signals in the body, supporting many important functions.

People often use “salt” and “sodium” interchangeably, but they’re different. Table salt is made up of about 40% sodium and 60% chloride. Sodium is one part of salt, and most of the sodium we eat comes from salt in foods.

**Why Do We Need Sodium?**

* Fluid Balance: Sodium helps the body keep the right amount of fluids, which is key for controlling blood pressure.
* Nerve and Muscle Function: Sodium helps send signals in our nerves, allowing us to move our muscles and feel sensations.
* Teamwork with Potassium: Sodium and potassium work together to keep our cells healthy by balancing acid and base levels, moving nutrients into cells, and getting waste out.

Image Suggestion: A simple diagram showing sodium’s functions in the body—like a droplet representing fluid balance, a muscle for movement, and a lightning bolt for nerve signals.

**Everyday Sources of Sodium**

* In Cooking: Table salt is a staple in kitchens worldwide. It enhances Flavors, preserves food, and is often used in food curing.
* In Industry: Sodium compounds, like baking soda, are also used in baking, cleaning, and fire extinguishers.

*Key Takeaway*

*Sodium is essential for health, but too much can be harmful. The following sections will explain how to manage sodium intake for a healthier lifestyle.*

**Sources**

* Centers for Disease Control and Prevention. (2020). Sodium: The Facts. Retrieved from www.cdc.gov/salt/facts.htm
* American Heart Association. (2021). How much sodium should I eat per day? Retrieved from www.heart.org/sodium

Section 2: How Much Sodium Do We Need?

**Objective**

To understand the daily recommended sodium limit and identify common sources of sodium in our diets.

**Sodium Intake Guidelines**

Understanding sodium guidelines from major health organisations can help you make informed decisions about your daily intake. Here are the current recommendations from the World Health Organisation (WHO), American Heart Association (AHA), and United Kingdom’s National Health Service (NHS):

**1. World Health Organization (WHO)**

**Guideline:** Adults should consume less than 2,000 mg of sodium per day (about 5 grams or 1 teaspoon of salt). Children’s limits are proportionally lower based on age and energy needs.

**Goal:** Reduce the risk of high blood pressure, stroke, and cardiovascular disease.

**2. American Heart Association (AHA)**

**Guideline:** Ideally, adults should limit sodium intake to no more than 1,500 mg per day, especially those at risk for high blood pressure. The general upper limit is set at 2,300 mg per day.

**Goal:** Lowering sodium to 1,500 mg can significantly reduce blood pressure and improve heart health.

**3. United Kingdom’s National Health Service (NHS)**

**Guideline:** The NHS advises no more than 2,400 mg of sodium daily for adults (equivalent to about 6 grams of salt). Children’s limits vary by age.

**Goal:** To help prevent high blood pressure and heart disease through manageable dietary changes.

These guidelines highlight the importance of reducing sodium intake to prevent health risks like high blood pressure and cardiovascular disease. Although specific recommendations vary, all three organisations agree on limiting sodium to improve heart and overall health. For most people, following these guidelines means cutting back on processed foods and choosing fresh options whenever possible.

**Common Sources of Sodium**

**Processed and Packaged Foods:** Around 70% of the sodium in our diets comes from processed foods, such as:

* Canned soups and vegetables
* Cheese and processed meats (like deli meats, suya, and bacon)
* Breads, rolls, and frozen meals
* Snack foods like chips, crackers, and pretzels

**Eating Out:** Many restaurant meals are high in sodium because of added sauces, marinades, and seasoned salts.

Image Suggestion: A pie chart showing the breakdown of sodium sources in the diet (e.g., processed foods, table salt, and naturally occurring sodium).

**How to Read Food Labels for Sodium Content**

Look for these terms to make informed choices:

* Low Sodium: 140 mg or less per serving
* Very Low Sodium: 35 mg or less per serving
* % Daily Value (%DV): This tells you how much of your daily sodium limit a serving of food contains. A %DV of 5% or less is low; 20% DV or more is high.

*Key Takeaway*

*Reading food labels can help you control sodium intake and make healthier choices.*

**Sources**

* American Heart Association. (2021). How much sodium should I eat per day? Retrieved from www.heart.org/sodium
* Centers for Disease Control and Prevention. (2020). Sodium: The Facts. Retrieved from www.cdc.gov/salt/facts.htm
* National Health Service. (2019). Salt: the facts. Available at: <https://www.nhs.uk/live-well/eat-well/salt-nutrition/>.
* World Health Organization. (2012). Guideline: Sodium intake for adults and children. Geneva: WHO Press. Available at: https://www.who.int/publications/i/item/9789241504836.

Section 3: Health Risks of Too Much Sodium

**Objective**

To learn about the serious health effects of consuming too much sodium.

**Health Risks of High Sodium Intake**

1. High Blood Pressure (Hypertension): Eating too much sodium causes the body to retain extra water, which raises blood pressure. This can damage blood vessels, increasing the risk of heart issues.

2. Heart Disease: High blood pressure from excess sodium can lead to heart disease, including heart attacks and heart failure.

3. Kidney Damage: The kidneys filter out sodium. Too much sodium overworks them, which can lead to kidney disease or failure over time.

4. Bone Health (Osteoporosis): High sodium intake can cause the body to lose calcium, a key mineral for bone strength, potentially leading to osteoporosis, especially in older adults.

**At-Risk Groups**

Some people are more sensitive to sodium:

* Those with high blood pressure, diabetes, or kidney disease
* Older adults
* People of African descent, who may experience more severe effects from sodium

Image Suggestion: An infographic illustrating the health risks associated with high sodium—highlighting areas like the heart, kidneys, and bones.

*Key Takeaway*

*Too much sodium raises the risk of health issues such as heart disease, kidney damage, and weakened bones.*

**Sources**

* Mozaffarian, D., Fahimi, S., Singh, G. M., et al. (2014). Global sodium consumption and death from cardiovascular causes. The New England Journal of Medicine, 371(7), 624-634.
* Nerbass, F. B., Pecoits-Filho, R., Mcintyre, N. J., et al. (2014). High sodium intake is associated with important risk factors in chronic kidney disease. European Journal of Clinical Nutrition, 69, 786-790.

Section 4: Benefits of Reducing Sodium

**Objective**

To understand the positive health outcomes of reducing sodium intake.

**Health Benefits of Lowering Sodium**

**Lowers Blood Pressure:** Studies show that reducing sodium can lower blood pressure, protecting the heart and blood vessels.

**Reduces Risk of Heart Disease:** Lower sodium intake can help prevent heart disease and stroke, lowering long-term health risks.

**Protects Kidney Health:** Lowering sodium reduces stress on the kidneys, which can prevent kidney disease.

**Strengthens Bones:** By cutting back on sodium, you help your body retain calcium, which is vital for strong bones.

Image Suggestion: A benefits chart or visual showing the positive impact of reducing sodium—using icons for a heart, kidneys, and bones to represent each benefit.

*Key Takeaway*

*Reducing sodium intake is a simple way to improve heart, kidney, and bone health.*

**Sources**

* Jaques, D., Wuerzner, G., & Ponte, B. (2021). Sodium Intake as a Cardiovascular Risk Factor: A Narrative Review. Nutrients, 13(9), 3177.
* Kwon, S. J., Ha, Y., & Park, Y. (2017). High dietary sodium intake is associated with low bone mass in postmenopausal women. Osteoporosis International, 28, 1445-1452.

Section 5: Practical Tips to Reduce Sodium Intake

**Objective**

To provide simple, actionable steps to help reduce sodium intake in daily life.

**Tips to Lower Sodium**

1. Cook at Home: Preparing meals at home gives you control over salt levels. Use fresh ingredients and limit processed foods, which are often high in sodium.

2. Check Food Labels: Look for “low sodium,” “reduced sodium,” or “no salt added” products to lower your intake.

3. Use Herbs and Spices: Substitute salt with herbs, spices, vinegar, or lemon juice to add flavour without sodium.

4. Choose Fresh Produce: Fresh fruits and vegetables are naturally low in sodium. For canned or frozen produce, choose no-salt options or rinse to reduce sodium.

5. Be Careful When Eating Out: Ask for dishes without added salt and request sauces on the side. Choose baked, grilled, or steamed dishes over fried or breaded ones, which often contain more sodium.

Image Suggestion: A checklist graphic showing each tip with icons for cooking, label-reading, herbs, fresh produce, and dining out.

*Key Takeaway*

*By following these tips, you can significantly reduce your sodium intake and improve your overall health.*

**Sources**

* Doyle, M. E., & Glass, K. A. (2010). Sodium Reduction and Its Effect on Food Safety, Food Quality, and Human Health. Comprehensive Reviews in Food Science and Food Safety, 9(1), 44-56.

*Summary and Final Takeaway*

*Managing your sodium intake can lead to better blood pressure, heart health, stronger bones, and overall wellness. Small changes like choosing fresh foods, reading labels, and cooking at home can make a big difference.*

**Back Cover Description:**

This booklet offers a straightforward, practical guide to managing sodium intake for better health. With clear explanations about sodium’s role, recommended daily limits, health risks of too much sodium, and easy tips for reducing it, this resource equips readers to make healthier choices every day. Discover how sodium affects your body, where hidden sodium often lurks, and how you can lower intake without sacrificing flavour. Aimed at promoting better heart, kidney, and bone health, this booklet also provides useful tips for reading food labels and making low-sodium swaps. Whether you are looking to better understand sodium’s impact or need simple ideas to cut back, this guide makes it easy to take positive steps for your health.

**Resources and References**

For more information on sodium and health, visit these trusted resources:

* Centers for Disease Control and Prevention (CDC) - [www.cdc.gov](http://www.cdc.gov)
* American Heart Association (AHA) - [www.heart.org](http://www.heart.org)
* HEARTSAFRICA – www.heartsafrica.org

**Inside Back Cover - “Final Thoughts”:**

**Final Thoughts**  
Making healthier choices is easier when you’re informed. This booklet has provided you with the basics of sodium and health, showing how a few simple changes can make a big difference. Remember, managing sodium doesn’t mean losing flavour—it is about finding balance and discovering the natural tastes of fresh, wholesome foods. Use the practical tips and label-reading guidance in this booklet to keep sodium in check and support your heart, kidneys, and bones. For more resources on sodium and health, visit the trusted links provided in the Resources section.