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# SALEWSLETTER

### THE SALTY TRUTH

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Salt is closely related to many aspects of human history. Its uses are vast ranging from being used to preserve and flavor food to being used to promote fertility in animals (1,2). Salt was the primary form of currency used in the Middle Ages, so much so that even the word "salary" is derived from the Latin word "salarium", meaning "salt money".

Excessive salt (sodium chloride) intake contributes to increased risk of noncommunicable diseases like hypertension which in turn is a major risk factor for stroke, other cardiovascular diseases and kidney disease (3). Thirty percent of the cases of hypertension and related diseases, as well as 1.65 million annual deaths from cardiovascular events, are attributed by high dietary salt (4). Studies have also shown dietary salt intake is positively associated with the risk of gastric cancer (5)



# HOW MUCH SALT IS TOO MUCH SALT?

The World Health Organization (WHO) recommends that dietary sodium intake be less than 2000mg/day, based on strong to moderate evidence of the impact of sodium on blood pressure and cardiovascular disease (6). This includes the salt already in foods, salt added during cooking, and salt added at the table.

#### Making sense of the numbers

- •The chemical name for salt is sodium chloride.
- •Salt consists of 40% of sodium and 60% of chloride.
- •1 teaspoon of salt weighs around 5 grams and is equivalent to 2 grams (2000mg) of sodium.

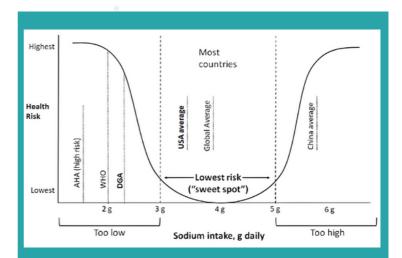
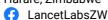


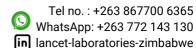
Figure 1. Diagram of health risk by sodium intake levels based on the current evidence. The lowest risk range (i.e., "sweet spot") for sodium intake is at  $\sim$ 3 to 5 g/day, with both lower and higher levels of intake associated with higher risk of cardiovascular disease or death. (7)



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Most of the salt in our diets comes from packaged foods. Salt is listed on food labels as sodium. When you check the Nutrition Information Panel for sodium, you should choose products with the lowest sodium or choose products that state "no added salt" or "salt reduced products."



## **HOW CAN YOU REDUCE SALT INTAKE?**

- 1.Use herbs, unsalted spices and salt-free seasoning blends to flavor food in cooking and at the table.
- 2. Cook rice, pasta, and hot cereal without salt (It might take your taste buds 4-6 weeks to adapt to a lower salt diet). Start with one step at a time - gradual changes are easier to sustain.
- 3. Cut back on instant or flavored rice, pasta, and cereal mixes, these usually have added salt.
- 4. Cut back on frozen dinners, pizza, packaged mixes, canned soups or broths, and salad dressina.
- 5. Rinse canned foods, such as tuna, to remove some sodium.
- 6. When available, buy low- or reduced-sodium or no-salt-added versions of food.
- 7. Remember Lemon is the new salt it brings out the natural flavor of your food. Use Lemon to flavor before going for salt.
- 8. Remove the saltshaker from the table.
- 9. Remember Part of making good food choices is knowing what you are eating!

# A typical nutritional information label looks like this:

**Nutrition Information Panel** Serving size per package: 9 Serving size: 83.5g (2 slices)

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	Quantity per serve	Quantity per 100g
Energy	91.8kJ	1100kJ
Protein	6.1g	7.3g
Fat	2.8g	3.3g
Carbohydrate	39.8g	47.7g
Dietary fibre	6.6g	7.9g
Sodium	230mg	275mg
•		

Aim for less than 120mg per 100g serving for low salt intake.

The Nutrition Information Panel on a label is often divided into columns. One column shows the nutritional value per 100 g of food and the other column, the values per suggested serving size, indicated for that specific product. In an additional column, the nutritional elements are listed and should indicate the energy, protein, fat, carbohydrates, sugar and sodium (salt) in the food product.

#### References:

1. Kidney International (2014) 86, 457-459. doi:10.1038/ki.2014.124

2.Int. J. Mol. Sci. 2020, 21, 4744; doi:10.3390/ijms21134744

3. From Salt To Salary: Linguists Take A Page From Science November 8, 2014

4.Rust P, Ekmekcioglu C. Impact of Salt Intake on the Pathogenesis and Treatment of Hypertension. Adv Exp Med Biol. 2017;956:61-84. doi: 10.1007/5584\_2016\_147. PMID: 27757935.

5.https://www.who.int/news-room/fact-sheets/detail/salt-reduction

6.Ge S, Feng X, Shen L, Wei Z, Zhu Q, Sun J. Association between Habitual Dietary Salt Intake and Risk of Gastric Cancer: A Systematic Review of Observational Studies. Gastroenterol Res Pract. 2012;2012:808120. doi: 10.1155/2012/808120. Epub 2012 Oct 22. PMID: 23125851: PMCID: PMC3485508.

7. Current Nutrition Reports (2022) 11:172-184

8. Andrew Mente, Martin O'Donnell and Salim Yusuf. Sodium Intake and Health: What Should We Recommend Based on the Current Evidence? Nutrients 2021, 13, 3232

9.Baker-Institute-factsheet-high-blood-pressure-and-salt

10. Your Guide to Lowering Blood Pressure (nih.gov)

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