Sodium and Wellness: A Balanced Perspective



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Future You Nutrition

Sodium vs Salt



- We tend to use the terms interchangeable, but they are different.
- **Sodium is a mineral. Salt is a compound that contains sodium.**
- Sodium
  - Sodium is a mineral and electrolyte
  - Your body needs it for fluid balance, nerve signals, and muscle function
  - It is found in salt and many other foods
- Salt
  - The table salt we eat is sodium chloride (NaCl)
  - It is made of sodium + chloride
  - Salt is a **seasoning and ingredient**
- **Salt is the package; sodium is the key nutrient inside.**

Why is salt important?



- sodium is an essential nutrient. Your body needs it to help regulate
  - fluid balance,
  - support nerve signals, and
  - allow muscles to contract properly.
- Salt is widely used for flavor and preservation. It's found in things like canned foods, breads, deli meats, soups, snacks, and fast food.
- Too much sodium can contribute to high blood pressure and increase the risk of heart disease and stroke.
- So, the short version is: salt is necessary for normal body function, but excess salt is a major health concern in the American diet.

High, but also Low



- We've all heard and know about the side effects of too much salt, high blood pressure!
  - Hypernatremia – high sodium concentration in the blood which **can lead to**
  - Hypertension – high blood pressure
- But what about low blood pressure –
  - Hyponatremia – low sodium concentration in the blood which **can lead to**
  - Hypotension - low blood pressure

Sodium Level	Interpretation
135–145 mEq/L (mmol/L)	Normal
Below 135 mEq/L	Hyponatremia (low sodium)
Above 145 mEq/L	Hypernatremia (high sodium)

For Some of Us…



- The major concern with too much salt in the American diet is high blood pressure, or hypertension.
- When you eat too much sodium, your body tends to hold on to extra water. That increases the amount of fluid in your bloodstream, which can raise the pressure against your artery walls.
- Over time, high blood pressure can damage the cardiovascular system and increase the risk of heart disease, heart attack, stroke, and kidney problems.
- So, basically: the major concern is that **excessive** salt intake can contribute to hypertension, which may lead to serious health complications.

Why do we need electrolytes?



- **Fluid balance**
  - Electrolytes help control where water moves:
    - **Inside cells** , **Outside cells** , **In the bloodstream**
  - Sodium is especially important for maintaining the amount of fluid outside your cells and helping maintain blood volume.
- **Heart function**
  - Your heart depends on electrical signals created by electrolytes:
  - Sodium, Potassium, Calcium, Magnesium
  - Imbalances can affect heart rhythm.
- **Muscle movement**
  - Muscles contract and relax through electrolyte signals. Low levels can contribute to:
  - Muscle cramps
  - Weakness
  - Fatigue
- **Nerve communication**
  - Electrolytes allow nerves to send messages throughout your body, including signals involved in:
  - Movement
  - Sensation
  - Brain function

Why do we get electrolytes?



Electrolyte	Main Roles	Food Sources
Sodium (Na^+)	Maintains fluid balance, supports blood pressure, helps nerves and muscles communicate	Salt, dairy, seafood, soups, eggs, olives
Potassium (K^+)	Helps regulate heart rhythm, muscle contraction, and balances sodium's effects	Potatoes, beans, bananas, avocado, leafy greens
Chloride (Cl^-)	Helps maintain fluid balance and stomach acid production for digestion	Salt, seafood, dairy, vegetables
Calcium (Ca^{2+})	Builds bones and teeth, supports muscle contraction, nerve signaling, blood clotting	Dairy, fortified foods, tofu, sardines
Magnesium (Mg^{2+})	Supports muscle relaxation, nerve function, energy production, and heart rhythm	Nuts, seeds, beans, whole grains, greens
Phosphate (PO_4^{3-})	Supports energy production, bones, and cell function	Meat, dairy, beans, nuts

Be cautious with electrolyte drinks



- Many commercial electrolyte products are designed for:
  - Endurance athletes
  - Heavy sweating
  - Hot environments
- They may contain:
  - Large amounts of sodium
  - Added sugar
  - Excess calories
- For everyday use, many people do just as well with:
  - Water + balanced meals
  - A salty snack after heavy sweating
  - Milk or yogurt
  - Broth-based foods

Parkinsons and salt



- **Low blood pressure is common in Parkinson's**
- One of the most important concerns is **orthostatic hypotension** (a drop in blood pressure when standing).
- Symptoms include:
  - Dizziness
  - Lightheadedness
  - Blurred vision
  - Feeling faint
  - Falls
- This happens because Parkinson's can affect the autonomic nervous system, which regulates blood pressure.

What can you do about Orthostatic Hypotension?



- Stay Hydrated
- Stand up slowly /gradually
  - When sleeping, sit up. Then place your feet on the floor. Then stand up and pause. Only after feeing grounded, begin to walk.
- Wear compression garments
- Exercise regularly
  - Walking, swimming, stationary bike
- Common Triggers
  - Hot showers or hot tubs
  - Very hot weather
  - Alcohol
  - Standing still for long periods
  - Dehydration

Let’s talk NOVA scale



- Ultra-processed foods are a **major source of salt in the American diet**.
- Its estimated that American get up 60% of their daily calories from UPFs.
- Some UPFs you might know think are UPFs
  - Macaroni and cheese
  - Cereal
  - Crackers
  - Frozen pizza
  - Commercial bread

Granola

THE NOVA FOOD CLASSIFICATION SYSTEM

NOVA classifies foods according to the level of processing they have undergone.

GROUP 1

UNPROCESSED OR MINIMALLY PROCESSED FOODS

Foods in their natural state or that have been minimally processed to remove inedible parts or to make them safe, whilst retaining their natural properties.

Examples



Fresh, frozen or dried fruits and vegetables, grains, legumes, nuts, seeds, eggs, meat, fish, milk, plain yogurt, natural spices.

GROUP 2

PROCESSED CULINARY INGREDIENTS

Substances extracted from Group 1 foods or from nature by processes such as pressing, refining, grinding or milling. They are not meant to be consumed on their own.

Examples



Oils, butter, sugar, salt, honey, maple syrup, vinegar, starches, flour, spices, baking soda.

GROUP 3

PROCESSED FOODS

Foods made by adding Group 2 ingredients to Group 1 foods using processes such as canning, bottling, fermenting or baking. These are usually recognizable as modified versions of whole foods.

Examples



Canned vegetables, cheese, fresh sourdough bread, salted nuts, yogurt, pickles, sauerkraut, canned fish in water or oil.

GROUP 4

ULTRA-PROCESSED FOODS

Industrial formulations made mostly or entirely from substances derived from foods or synthesized in laboratories. They often contain little or no intact Group 1 foods.

Examples



Soft drinks, packaged snacks, macaroni and cheese, breakfast cereals, reconstituted meat products, sugary cookies, chocolate, ready meals.

Healthy ways to get sodium



Food	Serving Size	Approx. Sodium
Octopus	3 oz cooked	230–350 mg
Shrimp	3 oz cooked	150–300 mg
Clams	3 oz cooked	90–150 mg
Mussels	3 oz cooked	90–170 mg
Scallops	3 oz cooked	200–300 mg
Milk	1 cup	100–120 mg
Swiss chard	1 cup cooked	300–320 mg
Beets	1 cup cooked	120–130 mg
Celery	2 medium stalks	60–70 mg
Egg	1 large	60–70 mg

Healthy ways to get Potassium



Food	Serving Size	Potassium (mg)
Baked potato with skin	1 medium potato (5.3 oz)	~900 mg
Sweet potato with skin	1 medium sweet potato	~540 mg
White beans	½ cup cooked	~600 mg
Lentils	½ cup cooked	~365 mg
Spinach	½ cup cooked	~420 mg
Swiss chard	½ cup cooked	~480 mg
Tomato paste	¼ cup	~670 mg
Avocado	½ medium avocado	~485 mg
Banana	1 medium	~420 mg
Orange	1 medium	~240 mg
Cantaloupe	1 cup cubed	~430 mg
Prunes	½ cup	~635 mg
Raisins	¼ cup	~300 mg
Milk (cow's milk)	1 cup	~350 mg
Greek yogurt, plain	6 oz container	~240–300 mg
Salmon	3 oz cooked	~325 mg
Chicken breast	3 oz cooked	~250 mg
Beef (lean)	3 oz cooked	~300 mg
Tuna (canned)	3 oz	~200 mg
Pumpkin seeds	¼ cup	~250 mg
Almonds	¼ cup	~200 mg
Dark chocolate (70–85%)	1 oz	~200 mg

Healthy ways to get Magnesium



Food	Serving Size	Magnesium (mg)
Pumpkin seeds (pepitas)	1 oz (¼ cup)	~150 mg
Almonds	1 oz (about 23 almonds / ¼ cup)	~80 mg
Cashews	1 oz (about 18 cashews / ¼ cup)	~75 mg
Dark chocolate (70–85% cacao)	1 oz	~65 mg
Black beans, cooked	½ cup	~60 mg
Chickpeas (garbanzo beans), cooked	½ cup	~40 mg
Lentils, cooked	½ cup	~35 mg
Quinoa, cooked (whole grain/pseudo-grain)	1 cup	~120 mg
Brown rice, cooked	1 cup	~85 mg
Oatmeal, cooked	1 cup	~60 mg
Spinach, cooked	½ cup	~75 mg
Swiss chard, cooked	½ cup	~75 mg
Kale, cooked	1 cup	~30 mg

Healthy ways to get Calcium



Food Group / Food	Serving Size	Calcium (mg)
Milk (cow's milk)	1 cup (8 oz)	~300 mg
Greek yogurt, plain	6 oz container	~150–200 mg
Regular yogurt, plain	1 cup	~400–450 mg
Cheddar cheese	1½ oz (about 1.5 slices)	~300 mg
Fortified almond milk	1 cup (8 oz)	~300–450 mg
Fortified soy milk	1 cup (8 oz)	~300 mg
Fortified oat milk	1 cup (8 oz)	~300–450 mg
Tofu made with calcium sulfate	½ cup (about 4 oz)	~250–400 mg
Sardines with bones (canned)	3 oz	~325 mg
Collard greens, cooked	1 cup	~260 mg
Kale, cooked	1 cup	~180 mg
Bok choy, cooked	1 cup	~160 mg
Spinach, cooked	½ cup	~120 mg*

*Note: Spinach contains calcium, but much of it is bound to **oxalates**, which reduces how much calcium your body absorbs. Lower-oxalate greens like **kale, bok choy, and collards** are generally better absorbed calcium sources.

Healthy Higher-Sodium Snacks (Minimally Processed)



Snack	Serving Size	Approximate Sodium (mg)	Additional Nutrients
Cottage cheese	½ cup	350–450	Protein, calcium
String cheese or mozzarella or aged cheese	1 stick (1 oz)	180–220	Protein, calcium
Plain Greek yogurt with a pinch of salt	¾ cup	70–100 (+ added salt)	Protein, calcium
Hard-boiled eggs with a pinch of salt	2 eggs	140 (before salt)	Protein, choline
Roasted edamame (lightly salted)	¼ cup	180–300	Protein, fiber
Homemade Roasted chickpeas (lightly salted)	½ cup	150–250	Fiber, potassium
Mixed nuts (lightly salted)	¼ cup	120–200	Healthy fats, magnesium
Pumpkin seeds (lightly salted)	¼ cup	150–250	Magnesium, zinc
Olives	10 large	300–500	Healthy fats
Pickles	1 medium dill pickle	300–450	Very low calorie
Sauerkraut	½ cup	400–500	Probiotics (if unpasteurized)
Kimchi	½ cup	300–500	Probiotics, vitamin C
Vegetable sticks with salted hummus	¼ cup hummus	150–250	Fiber, protein
Bone broth	1 cup	300–700	Fluid, protein (varies)

Open Forum

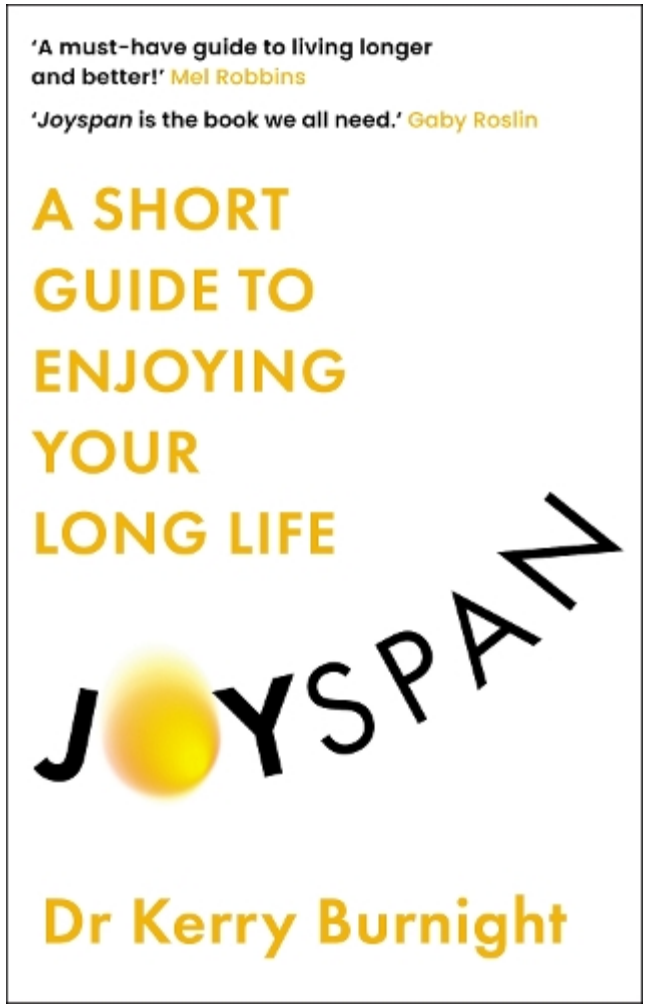


- What’s your favorite way to up your salt intake?
  - Salted nuts
  - Miso soup or lentil soup

Next Month!

- Healthy Eating - Sept 10th - Food as Medicine (and Mood)
  "We're not just eating for energy—we're eating for how we want to feel."

Book Club - Sept 14th – Joyspan by Kerry Burnight.



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Sources



- Ultra Processed People by Chris Van Tuleken