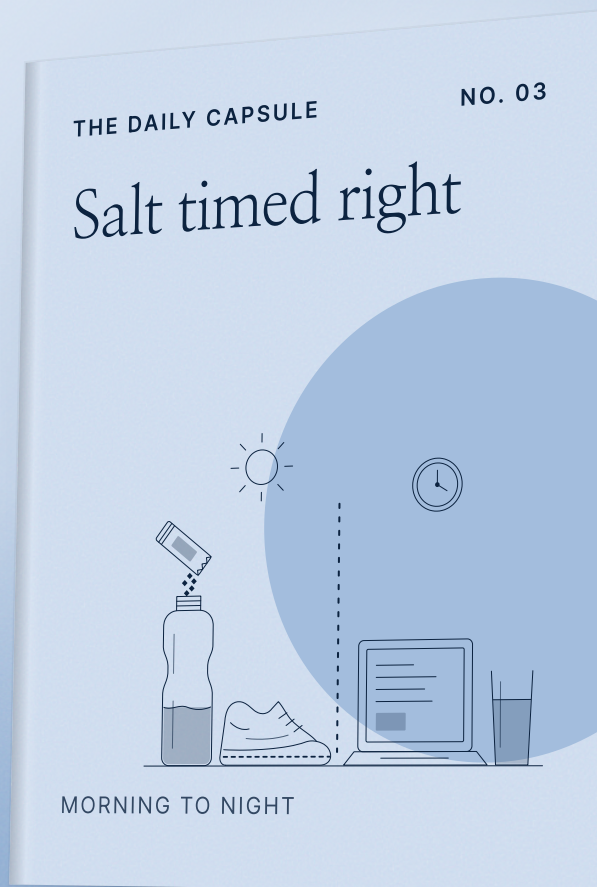




ROUTINE GUIDE · STACKS

How to build an electrolyte routine for training and desk days

Your cabinet is full and your mornings are rushed. After these ten minutes you will know where each powder lives, when it earns its place, and what to pair it with.

- **Food baseline**
Track three days of food minerals before you set powder times.
- **Dose math**
Read elemental magnesium and space it away from training fuel.
- **Sticky habit**
Anchor higher sodium to long sessions and water to desk hours.

By Ashley Chen · Updated Aug 20, 2026 · 11 min read

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Two sticks sit open in your gym bag, a third tub waits by the sink, and you cannot recall which one helped last Thursday. You fill a bottle, guess at half a serving, then head out the door already behind schedule. A small timing plan fixes that scramble fast.

01

Anchor food first, then set powder times

No routine holds until meals and drinks get counted. Sodium, potassium, magnesium and calcium from food create the baseline, and sweat loss gets layered on top for training days. Desk days often run fine on water alone, because typical eating already passes the guideline ceiling for sodium.

The reference points keep planning steady. Adequate Intake sits near 1,500 mg sodium daily and the guideline ceiling sits at 2,300 mg, and average eating already tops that ceiling. Potassium sits at 3,400 mg for men or 2,600 mg for women, with sodium starting at 1,500 mg and rising with activity. Adult Recommended Dietary Allowances for magnesium span 400 to 420 mg for men and 310 to 320 mg for women ages 19 to 50 and older, varying by age band. Roughly 30 percent to 40 percent of magnesium from foods and drinks is usually absorbed by the body.

Track three normal days. Count bread, cheese, soup, sauces, canned beans, pickles and restaurant plates, because those foods deliver most sodium. Count fruit, potatoes, beans, yogurt and milk for potassium. Count nuts, seeds, legumes and whole grains for magnesium. Then layer training on top. Sweat carries on average around 900 mg sodium and 200 mg potassium per litre, although variation across people is broad. Sweat sodium spans about 460 to 2,300 mg per liter, and sweat output spans 0.5 to 2 or more liters per hour.

How to log it

Run a plain sheet for one week. Write sodium, potassium, magnesium and calcium from meals. Mark workout length, heat, clothing and pale salt lines on gear. Describe thirst, urine shade and stool pattern in simple terms. Take that sheet to a clinician when sodium guidance feels contradictory, because advice on sodium remains unsettled between lower sodium counsel for blood pressure and greater need with heat, keto or heavy sweating, so setting matters.

FROM THE EDITORS

Track intake, form, dose and tolerance across weeks, since serum levels do not fully reflect body stores. Total magnesium status cannot be read from blood tests alone, and a lone lab value stays incomplete.

02

Pair sodium and potassium to the hour

Flip the stick and read mg sodium per stick or serving first. Set high sodium sticks near 500 to 1000 mg beside lighter daily blends. A workable starting window is 300 to 600 mg sodium per hour of hard work in heat, tuned to saltiness of sweat. That window comes from exercise science journals, not from a flavor title or a front panel promise.

Potassium stands next to sodium in most blends. Review potassium per serving against meals, since food goals already reach into the thousands of milligrams daily. A powder has to cover sodium, potassium, magnesium and calcium while also mixing well, tasting okay and staying stable on the shelf. Sugar belongs in this check too. Trials on output and tiredness have pointed to 60 to 80 g per L of carbohydrate in rehydration drinks. Glucose paired formulas employ sugar for uptake, so review sugar because that formula decision alters calories and flavor as well as transport.

Drinks near 275 to 295 mOsm per kg water are sold to replace electrolytes lost in training. Osmolality means the concentration of dissolved particles in the drink. Fruit recovery powders can struggle to stay stable at low pH while holding osmolality and taste steady, so recipes vary even when sodium looks alike.

USE CASE	SODIUM SIGNAL ON LABEL	POTASSIUM AND SUGAR CHECK
Long, hot or heavy sweat session	Higher sodium per serving, toward 500 to 1000 mg per stick, matched to 300 to 600 mg sodium per hour in heat	Note potassium mg and sugar grams, since glucose paired types rely on sugar
Short session under an hour	Lower sodium mix or water only, since food already supplies baseline sodium	Keep sugar low if the session was light and food follows soon
Desk work or office day	Lowest sodium option or plain water, because average intake already exceeds 2,300 mg	Compare potassium to food intake first before adding more powder

The precise sodium and potassium mg per stick for any particular brand cannot appear here, which requires reading that label. Batches shift, flavors shift and serving sizes shift, so tie the routine to the label in use. Photograph the Supplement Facts panel and the other ingredients line at the shelf, then stack sticks by milligrams, not by marketing terms.

03

Space magnesium by form and elemental dose

Supplement Facts panels show elemental magnesium, for example Magnesium 200 mg, not the full weight of magnesium glycinate, citrate or oxide. That difference controls the whole stack. Compound weight looks large. Elemental amount drives intake math.

Magnesium glycinate runs about 14 percent elemental magnesium by weight, so a 1,000 mg capsule supplies roughly 140 mg elemental. Magnesium citrate runs near 11 percent elemental, so a 1,000 mg dose supplies near 110 mg elemental. Common doses span 200 to 400 mg of elemental magnesium in the evening for glycinate, and 200 to 400 mg elemental with water for citrate. For many adults a careful trial is 100 to 200 mg elemental magnesium daily, then adjust based on benefit and bowel tolerance.

Form shifts tolerance and solubility. Magnesium oxide dissolves less readily than many other forms, so more unabsorbed magnesium may remain in the gut and draw water into the intestines. Magnesium citrate mixes better than oxide, so uptake is usually fuller, yet larger evening doses can still soften stools. Magnesium glycinate is magnesium joined to glycine and it is usually gentle and less prone to loosen bowels.

Which form fits which need

Select oxide only when a laxative effect is the stated goal on the label. Select citrate when the label states support plus bowel movement and the buyer accepts looser stools at higher doses. Select glycinate for gentle daily use with food, starting low and adjusting by bowel tolerance. Keep daytime hopes modest for malate, since magnesium data vary by aim, with mixed sleep results and thin support for malate energy claims. Background comes from Examine pages on magnesium, zinc and sodium balance, which review trials without pledging a result for any reader.

To calculate what 1,000 mg of powder truly provides, multiply compound milligrams by the elemental share. A scoop listing 1,000 mg magnesium citrate blend does not provide 1,000 mg magnesium. At about 11 percent elemental it provides near 110 mg. A capsule listing 1,000 mg magnesium glycinate provides near 140 mg. Then count magnesium from meals, then set that sum beside 400 to 420 mg for men and 310 to 320 mg for women. Sweat output and sweat sodium differ widely and alter dose needs, and food uptake rests near 30 percent to 40 percent, so dose humbly and note tolerance.

04

Make taste, mixing and gut feel routine ready

Flavor decides whether a powder survives past week two. Magnesium and potassium can add harsh notes, so plan on flavor cover and small recipe tweaks to keep the nightly mix drinkable. Citrus, saltiness, bitterness and chalkiness all stem from the minerals themselves, not only from flavouring. A blend that covers bitterness with strong sweetener may please on day one and fatigue by week three.

Confirm quick and full mixing. Mix the stick into the listed amount of water at the listed temperature before training or bed. Stir for the stated time. Watch for grit, film, foam or sediment at the bottom of the glass. Sound control covers identity, potency and purity checks, microbe tests, stability work and label review. Mixing in the glass does not prove uptake in the body, yet weak mixing often lines up with gut complaints.

Connect high osmolality and heavy carbohydrate loads to slower water uptake and gut discomfort. A very sweet, very strong bottle can feel heavy during a run or a ride. Heavy carbohydrate doses slow stomach emptying for some people. When cramping, nausea or urgent stools follow a new powder, lower the concentration, add water, move magnesium dosing away from training fuel, or return to water for short sessions. See a professional when cramps, dizziness, swelling or blood pressure worries continue.

FROM THE EDITORS

Ask what each term means in milligrams, in test limits and in lot numbers, and favor a founder who lists growers and shares papers while naming any step still unclear. Terms like pure and natural should arrive with a paper behind them.

05

File lot proof and sport screening by bottle

A Certificate of Analysis applies to one lot or batch, not to a brand for all time. Request a Certificate of Analysis tied to your own lot. Seek identity of each electrolyte mineral, potency in milligrams per serving, and purity checks including microbiological tests. Begin with the published limits for lead, cadmium, arsenic and mercury. USP General Chapter 2232 caps daily intake at 10 micrograms per day for lead, 15 for inorganic arsenic, 5 for cadmium and 15 for total mercury. Those caps govern daily dose, so milligrams per serving and servings per day both matter.

Favor ongoing certification marks over a single old test. Certification builds trust yet it never replaces factory compliance and never pledges legal cover or zero risk. No powder lot can be judged on heavy metal or sport rules without its lot Certificate of Analysis or certification entry. Encapsulation and fill weight can vary, so confirm that the lot number on the tub matches the document.

For drug tested sport, pick screened lots and confirm lot numbers match the database. NSF Certified for Sport tests each lot for more than 290 compounds banned by bodies including WADA, NFL, MLB, NHL, PGA, LPGA and MLS. Informed Sport reports that as many as one in ten supplements carry ingredients and compounds barred in sport. USADA names NSF Certified for Sport as the program best fit for athletes seeking lower supplement risk. Screening brings added cost and forms, which is why screened powders print lot numbers plus searchable certificates. When a product claims screening but the lot is missing from the list, treat the chain as opaque until it is shown.

06

Assign bottles to training days and office days

Reserve higher sodium only for long, hot or heavy sweat sessions. Keep lower sodium or water for short sessions and desk work. The split holds total sodium nearer food goals while covering large sweat losses when they occur.

Training days begin with duration and heat. Work past an hour, work in heavy kit, and work ending in white salt streaks all argue for more sodium. The practical starting range of 300 to 600 mg sodium per hour in heat can be set beside the stick label. Two milder sticks can match one high sodium stick. Plain water still handles much of the load. Log what you drink and tune it to thirst, saltiness of sweat and clinician input.

Office days begin with food. When meals already pass 2,300 mg sodium, an extra salty stick adds little except taste. Water plus potassium from food plus magnesium from food often meet daily needs. A small magnesium powder in the evening may suit a household routine better than a salty drink at the desk, with dose read as elemental milligrams and tolerance watched. For a partner, a child or a parent, use separate products, separate doses and separate clinician input, since needs shift with age, size, medicines and activity.

Revisit the setup each season. Heat, training volume, travel and illness shift sweat and intake. Keep the shelf small. Store one higher sodium choice for training, one lower sodium choice or water for daily sipping, and one magnesium form with a stated elemental dose. File the lot papers beside the tubs. When results no longer back a product, drop it from the lineup.

The checklist

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- ☐ Record food sodium, potassium, magnesium and calcium across three days
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- ☐ Mark sweat length, heat and salt lines on training days
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- ☐ Read mg sodium per stick and set 500 to 1000 mg sticks beside daily blends
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- ☐ Check potassium mg plus sugar grams in each serving
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- ☐ Read elemental magnesium mg on Supplement Facts, not compound weight, before adding it to the stack.
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- ☐ Multiply compound mg using 14 percent for glycinate or 11 percent for citrate
-
- ☐ Begin magnesium at 100 to 200 mg elemental and tune by bowel tolerance
-
- ☐ Mix in the stated water volume and look for grit
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- ☐ Ask for the per lot Certificate of Analysis and align lot numbers
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- ☐ Compare heavy metal results with USP 2232 daily dose values
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- ☐ For sport, verify screened lot standing in the certification database
-
- ☐ Place higher sodium on long hot sessions, water on office days
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- ☐ Talk through intake with a clinician when blood pressure or medicines apply
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Sources and further reading

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For information only, not medical advice. These statements have not been evaluated by the Food and Drug Administration; supplements are not intended to diagnose, treat, cure or prevent any disease. Check with a doctor or pharmacist before starting one, especially if you are pregnant, nursing or take medication.



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Ashley produces the interviews at The Daily Capsule: the research, the question lists, the follow-ups. Her favorite question comes last, when she asks a founder exactly when, and with what, they take their own product.
