

Supplemental table 1. Overview of the included German products.

Supplemental table 2. Sodium content of the included products from the United States of America.

Supplement figure 1. Number of different German dietary supplement effervescent tablets that contain a certain amount of sodium (classified in 100 mg increments).

Supplement figure 2. Number of different pharmacy-only effervescent tablets that contain a certain amount of sodium (classified in 100 mg increments).

Supplement figure 3. Central illustration.

Supplement table 1. Overview of the included German products.

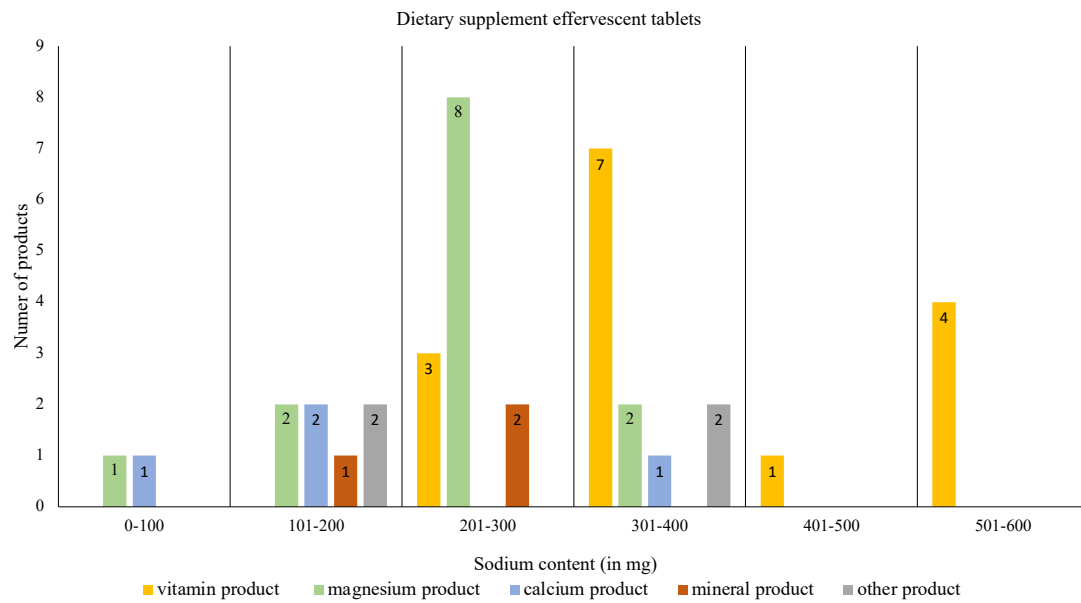
Offeror	Manufacturer	Brand name®	Number of tablets	Total weight (g)	Weight/tablet (g)	Total price (cent)	Price/tablet (cent)
ALDI SÜD GmbH & Co.	Vitalis	Magnesium 240 mg	14	78	5.6	45	3.2
		VitaminC 120 mg	20	80	4.0	45	2.3
Edeka Stiftung & Co. KG	ELKOS Vivede	VitaminC+ Zink, Selen, Vitamin D3	17	102	6.0	55	3.2
		Magnesium+ B-Komplex, Vitamin C und E	17	102	6.0	55	3.2
		Multivitamin+ Mineralstoffe	17	102	6.0	55	3.2
Netto Marken-Discount Stiftung & Co. KG	ProLife	VitaminC+ Zink, Selen, Vitamin D3	17	102	6.0	55	3.2
		Magnesium+ B-Komplex, Vitamin C&E	17	102	6.0	55	3.2
		Multivitamin+ Mineralstoffe	17	102	6.0	55	3.2
		Calcium+ Vitamin K1, D3, Folsäure	17	102	6.0	55	3.2
DM drogerie markt GmbH & Co. KG	Mivolis	Magnesium	20	82	4.1	45	2.3
		VitaminB12	20	82	4.1	45	2.3
		Calcium	20	82	4.1	45	2.3
		Multi-Mineral	20	82	4.1	45	2.3
		VitaminC	20	82	4.1	45	2.3
	Kneipp	Magnesium+ Calcium+ D3	20	90	4.5	245	12.3
Müller Handels GmbH & Co. KG	Kneipp	Frauen Mineralstoffe	15	94	6.3	345	23.0
		Männer Mineralstoffe	15	84	5.6	399	26.6
	Abtei	Magnesium400 Plus Vitamin C+E	15	81	5.4	295	19.7
		Magnesium+ Kalium Aktiv Plus	15	82.5	5.5	275	18.3
	Sanotact	Recovery+ Aminosäuren	15	79.5	5.3	295	19.7
	Doppelherz	VitaminC+ Zink	15	94.5	6.3	295	19.7
		VitaminD3 2000 IE	15	97.5	6.5	275	18.3
		A-Z Multivitamin+ Mineralien	15	93	6.2	279	18.6
Magnesium 400		15	97.5	6.5	275	18.3	

		Magnesium+ Calcium+ D3	15	97.5	6.5	279	18.6
		Magnesium 500+ B12	15	97.5	6.5	249	16.6
		Magnesium+ Kalium Sport	15	99	6.6	299	19.9
	Fit + Vital	Caclium+ D3	20	80	4.0	139	7.0
		Multivitamin	20	80	4.0	45	2.3
		Vitamin C1000	15	93	6.2	139	9.3
		Multivitamin+ Mineral	20	80	4.0	45	2.3
		Magnesium	20	80	4.0	45	2.3
		Eisen+ VitaminC	20	80	4.0	139	7.0
		Caclium 1000	15	93	6.2	45	3.0
		Magnesium 400	15	81	5.4	45	3.0
		SilaVit	Immun Aktiv	20	84	4.2	139
	Vitamin B12		20	80	4.0	125	6.3
	Vitamin C		20	80	4.0	45	2.3
	Isostar	Hydrate & Perform	10	120	12.0	399	39.9

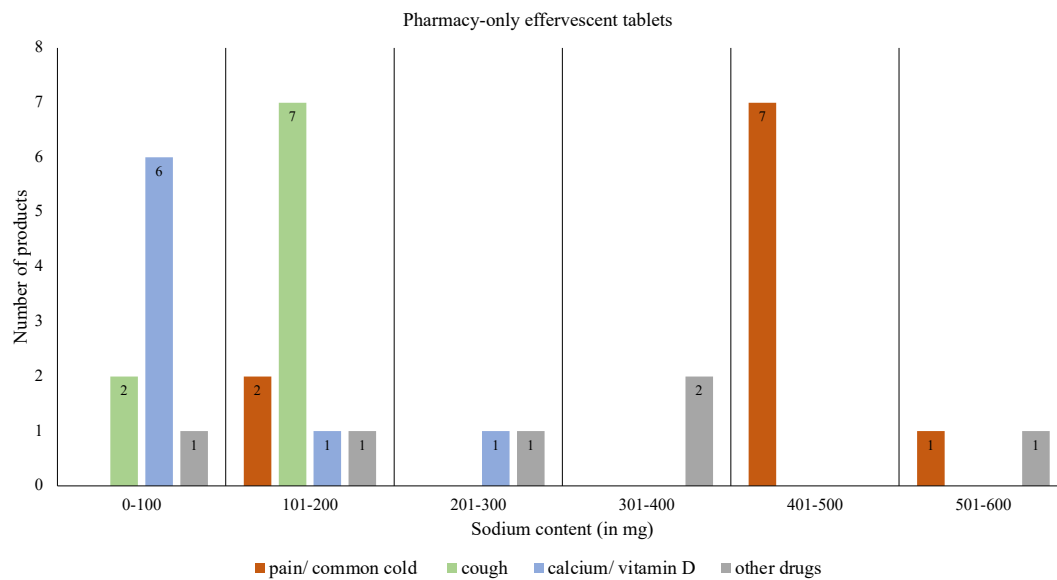
Supplement table 2. Sodium content of the included products from the United States of America.

Brand name®	Manufacturer	Category	Sodium content/tablet (mg)
ActivJoint Tangerine	Trace Minerals Research	Other	155
Advanced Anti-Aging Formula Effervescent Drink Mix Orange	TimeFighters	Other	55
Airborne Dual Action Citrus	Airborne	Vitamin	230
Airborne Elderberry Effervescent Tablets	Airborne	Mineral	230
Airborne Immune Support Effervescent Tablets	Airborne	Vitamin	230
Airborne Vitamin C Original Lemon Lime	Airborne	Vitamin	230
Airborne Zesty Orange	Airborne	Mineral	150
Alka-Seltzer Plus Immunity Complex	Bayer	Vitamin	313
Amino X Fruit Punch	BSN	Other	160
AngiNOX Natural Orange Flavor	XYMOGEN	Other	220
Berocca Orange Flavor	Bayer	Energy	260
Best Defense Orange Boost	Herbalife Nutrition	Vitamin	115
BetaBoost + Vitamin C Citrus	Airborne Advanced	Vitamin	240
Carni-Fizz Natural Lemon Lime Flavor	Body Fizzics	Other	245
CuraMed Natural Tangerine Flavor	Terry Naturally	Other	130

CuraPro 350 mg Tangerine Effervescent	EuroMedica	Mineral	130
Effer-C Lemon-Lime Effervescent Drink Mix	NOW	Vitamin	50
Effervescent Effer-Energy Tropical Punch	NOW Sports	Mineral	360
Effervescent Effer-Hydrate	NOW Sports	Mineral	360
Effervescent Energy Lava Lime	Eruption	Energy	240
Effervescent Vitamin C 1000 mg Natural Orange Flavor	Sundown Naturals	Vitamin	60
Effervescent Vitamin C Orange Flavored	365 Everyday Value	Vitamin	60
Energyze Isotropin Lemon Flavor Effervescent	Newton-Everett	Energy	150
Energy Berry Blast	Nuun	Energy	100
Ester-C Effervescent 100 mg Plus Electrolytes Natural Orange Flavor	American Health	Vitamin	100
Ester-C Effervescent 1000 mg Natural Orange Flavor	NatureSmart	Vitamin	100
Ester-C Effervescent 1000 mg Natural Raspberry	American Health	Vitamin	55
Ester-C Effervescent 1000 mg Natural Raspberry Flavor	Solgar	Vitamin	40
Evotest Black Cherry	BSN	Other	300
Garcinia Cambogia Lineatabs Passion Fruit Flavor	Apax	Other	190
Green Superfood Detox Orange Turmeric Flavor	Amazing Grass	Other	260
Immune Oxylent Effervescent Supplement Drink	Immune Oxylent	Vitamin	90
Immune Support Orange Flavor	Equate	Vitamin	230
Immuni-V Orange Effervescent	MRI Performance	Vitamin	85
Immunity Blueberry Tangerine	Nuun	Vitamin	100
Isotropin Rejuvenation Tangerine Flavor	NewtonEverett	Other	255
Liftoff Tropical Fruit Force	Herbalife Nutrition	Vitamin	230
Lineatabs	Apax	Other	270
Nuun Active Fruit Punch	Nuun	Vitamin	360
Nuun Hydration Tri-Berry	Nuun	Mineral	360
POW Berry-Melon Fizz	EBOOST	Energy	190
POW Berry-Melon Fizz	EBOOST	Energy	155
Power Pak Cranberry	Trace Minerals Research	Vitamin	175
Pumped Edge Fruit Punch	BSN	Other	200
Sambucus Fizzy Berry Flavored	Nature's Way	Other	160
Sport +Caffeine Fresh Lime	Nuun	Energy	300
Sport Fruit Punch	Nuun	Mineral	300
Sport Oxylent 3-In-1 Performance Supplement Drink Blueberry Burst	Sport Oxylent	Mineral	90
Vitamins Blueberry Pomegranate	Nuun	Vitamin	100
Wal-Born Orange Flavor	Well At Walgreens	Other	230
ZYM Electrolyte Drink Tablets	ZYM	Mineral	250



Supplement figure 1. Number of different German dietary supplement effervescent tablets that contain a certain amount of sodium (classified in 100 mg increments).



Supplement figure 2. Number of different pharmacy-only effervescent tablets that contain a certain amount of sodium (classified in 100 mg increments)

What is known ?

- Dietary sodium intake → BP ↑ and CV events ↑
- Recommended daily sodium intake: < 2000 mg
- ETs contain high amounts of sodium (often not labeled)
- approx. 30% of the population regularly consume ETs as dietary supplements and/or drugs

Dietary supplement ETs

- 39 included
- Average sodium content: 283.9±122.6 mg → 4-28% of the RDSI
- Highest average sodium content: vitamin products (378.3±112.8 mg)
- Lowest average sodium content: calcium products (170.4±113.2 mg)
- Vitamin products: more sodium than magnesium (p=0.004), calcium (p=0.006) and mineral (p=0.048) products

Pharmacy-only ETs

- Median sodium content: 157.0 mg (IQR: 98.9-417.3 mg) → 3-29% of the RDSI
- Highest median sodium content: pain/ common cold drugs (452.1 mg; IQR: 351.3-474.0 mg)
- Lowest median sodium content: calcium/ vitamin D drugs (87.0 mg; IQR: 52.0-103.0 mg)
- Median sodium content of the MDD of pain/ common cold drugs: 2,776.5 mg (IQR: 1,299.8-3,333.0 mg)

Conclusion

- ETs contain a relevant amount of sodium (often unknown or neglected)
- Additional sodium intake → poor BP control and CV events ↑
- Sodium loaded ETs should be avoided in patients at risk



Supplement figure 3. Central illustration. BP= blood pressure; CV= cardiovascular; ET= effervescent tablets; HHF= hospitalization for acute heart failure; IQR= interquartile range; MDD= maximum daily dose; RDSI= recommended daily sodium intake.