

Umami and Sodium Intake: An Evidence Scoping Review

Research Question: Among adults, what is the availability of literature examining the effect of umami (or foods containing umami substances) on sodium intake?

Inclusion/Exclusion Criteria

	Inclusion Criteria	Exclusion Criteria
Peer-Review	Peer-reviewed and published in a juried	Non-peer-reviewed articles, such as
Status	publication in a peer-reviewed section	government reports, position
	within the publication; studies/trials in	statements, editorials, letters to the
	progress and registered	editor, etc.
Population and	Human adults (≥18 years)	Animal studies. Human studies in
Age		adolescents, children and infants.
Setting	Any setting	None excluded.
Health Status	Open	None excluded.
Interventions	Interventions focused on umami	Interventions not focused on umami
	substances or foods containing umami	substances or foods containing umami
	substances	substances
Comparison	For RCTs, include at least one control	No comparison group.
-	group (e.g. usual care, placebo,	
	alternative sodium substitute).	
Study Design	Clinical trials (RCTs, NRCTs, non-	Narrative review, grey literature, single
Preferences	controlled trials, observational studies	case-study, case report, book chapter,
	(cross-sectional, cohort, case-control,	abstracts that are not registered
	case studies, meal studies), qualitative	studies/trials
	studies, systematic reviews and meta-	
	analyses, conference abstracts.	
Minimum	Any duration.	None excluded.
Study Duration		
Size of Study	Open	Open
Groups		
Study Drop Out	Open	Open
Rate Outcome	Sodium intake-related outcome	Outcome not related to sodium intake
Year Range	Open – no date limit.	Open.
Language	Limited to articles in English	Articles not published in English
Databases	Medline/PubMed, CINAHL, Embase,	A deles not published in Eligibii
Databases	Web of Science, PsycINFO, Cochrane,	
	Scopus. Registered/in-progress trials:	
	clinicaltrials.gov, NIH reporter, WHO,	
	chineaterals.gov, rent reporter, verio,	

Inclusion Criteria	Exclusion Criteria
Cochrane, PROSPERO. Any other databases that Heidi can access	

Search Terms: Title or Abstract Must Include One Umami Term and One Sodium Intake Term (as well as limits for Humans and English)

Terms Related to Umami	AND	Terms Related to Sodium Intake
MESH terms:		MESH terms:
Sodium glutamate		Sodium, dietary
Non-MESH terms:		Non-MESH terms:
Non-MESH terms.		Salt* (includes salty, saltiness)
Umami substances:		Sodium
omanii substances.		Sodium chloride
Umami		Salt intake
Umami-rich		Salt reduction
Monosodium glutamate		Salt restriction
Monosodium L-glutamate		Sodium intake
MSG (but not Mycoses Study Group)		Sodium reduction
Sodium L-glutamate		Sodium restriction
Glutamate		Sodium chloride intake
L-glutamate		Sodium chloride reduction
Glutamic acid		Sodium chloride restriction
L-glutamic acid		Dietary salt
Aspartic acid		Dietary sodium
Aspartate		Dietary sodium chloride
Glutamate salt		Low salt
Potassium glutamate		Low sodium
Potassium L-glutamate		Low sodium chloride
Calcium glutamate		Reduced salt
Calcium L-glutamate		Reduced sodium
Calcium di-glutamate		Reduced sodium chloride
CDG		Salt-reduced
Ammonium glutamate		Sodium-reduced
Ammonium L-glutamate		
Nucleotide		
Ribonucleotide		
5'-ribonucleotide		
Guanosine 5'-monophosphate		
Guanosine monophosphate-5		
Guanoside monophosphate		
Guanylate		
GMP		
Inosine 5'-monophosphate		
Inosine monophosphate		

Inosine monophosphate-5	
Inosinate	
IMP	
Adenosine 5'-monophosphate	
Adenosine monophosphate	
AMP	
Disodium inosinate	
Disodium guanylate	
Foods containing umami substances	
(those from White Paper: at least 50 mg	
free glutamic acid per 100 g):	
Chinese food	
Japanese food	
Asian food	
Scallop	
Crab	
Bonito	
Dashi	
Sardines	
Mackerel	
Tuna	
Squid	
Oyster	
Clam	
Mussel	
Cured ham	
Sausage	
Cheese	
Parmesan	
Mozzarella	
Emmenthaler	
Cheddar	
Stilton	
Roquefort	
Gruyere	
Saint Paulin	
Camembert	
Danish Blue	
Gouda	
Grape	
Grape Juice	
Tomato*	
Cabbage	
Chinese cabbage	
Napa cabbage	
Corn	
Green peas	
Onion	1

Potato	
Sweet potato	
Mushrooms	
Shiitake Mushrooms	
Broccoli	
Soybeans	
Soy sauce	
Fish sauce	
Oyster sauce	
Green tea	
Seaweed	
Dried kelp	
Fermented beans	
Fermented products	
Fermented foods	
Yeast extract	
Olives	
Tamari	
Mirin	
Rice vinegar	