

Supplementary Table 2. The expanded dietary supplement terms generated using word2vec and GloVe and adapted from two dietary supplement knowledge bases: Dietary Supplement Labeling Database, and Natural Medicine Comprehensive Database.

Dietary supplements	Expanded terms	Type			Source			
		Semantic variant	Brand name	Misspelling	Word2vec	GloVe	DSLDD	NMCD
Calcium	Citracal		✓		✓			
	Calcarb		✓		✓			
	Oysco		✓		✓			
	Caltrate		✓			✓		
	Calicum			✓	✓			
	Calium			✓	✓			
	Calcum			✓	✓			
	Calcim			✓	✓			
	Calcuim			✓	✓			
	Calicium			✓	✓			
	Calciu			✓	✓			
	Bone Meal	✓					✓	✓
	Calcarea Carbonica	✓					✓	✓
	Calcarea Phosphorica	✓					✓	✓
	Calcio	✓					✓	✓
	Dolomite	✓						✓
	Hydroxyapatite	✓					✓	✓
	Microcrystalline Hydroxyapatite	✓					✓	✓
	Ossein Hydroxyapatite	✓						✓
	Stimucal Hydroxyapatite	✓					✓	
	Oyster Shell	✓						✓
	Phosphate Tricalcium	✓						✓
	Tricalcium Phosphate	✓					✓	✓
	Aquamin		✓				✓	
	TRAACS		✓				✓	
	DimaCal		✓				✓	
	Chamomile	Camomile	✓			✓	✓	✓
Camomille				✓	✓			
Matricaria		✓				✓		
Matricaria recutita		✓					✓	✓
Chamomilla recutita		✓						✓
Matricaria chamomilla		✓					✓	✓
Manzanilla		✓						✓
Chamomilla	✓					✓		
Cranberry	Cran	✓			✓			
	Ellura		✓		✓			
	Craberry			✓	✓			
	Vaccinium Macrocarpon	✓					✓	✓
	Oxycoccus macrocarpos	✓						✓
	Vaccinium oxycoccos	✓						✓
	Oxycoccus microcarpus	✓						✓
Oxycoccus palustris	✓						✓	

	Vaccinium microcarpum	✓					✓	✓
	Vaccinium palustre	✓						✓
	Bearberry	✓						✓
	Grosse Moosbeere	✓						✓
	Moosbeere	✓						✓
	Mossberry	✓						✓
	CranRich		✓				✓	
	ShanStar		✓				✓	
	Cran-Max		✓				✓	
	Pacran		✓				✓	
	Cranrx		✓				✓	
	NutriCran		✓				✓	
Dandelion	Taraxacum Officinale	✓					✓	✓
	Taraxacum	✓			✓	✓		
	dandilion			✓	✓			
	Taraxacum Vulgare	✓						✓
	Leontodon Taraxacum	✓						✓
	Taraxacum Dens-leonis	✓						✓
	Taraxacum Officinate	✓					✓	
	Taraxacum Mongolicum	✓					✓	
	Blowball	✓						✓
	Cankerwort	✓						✓
	Cochet	✓						✓
	Pugongying	✓					✓	✓
	Swine Snout	✓						✓
	Wild Endive	✓						✓
	Taraxol	✓					✓	
	Taraxasterol	✓					✓	
Flaxseed	Flax	✓			✓	✓	✓	✓
	Linseed	✓			✓	✓		✓
	Linum usitatissimum						✓	✓
	Linum crepitans							✓
	Linum humile							✓
	Linum							✓
	LinumLife		✓				✓	
	MeadowPure		✓				✓	
	LignaMax		✓				✓	
	ActiFlax		✓				✓	
Garlic	Garlique		✓		✓	✓		
	Allium sativum	✓					✓	✓
	Allium	✓					✓	✓
	Lasuna	✓						✓
	Rust Treacle	✓						✓
	Allicin	✓					✓	
	Allisure		✓				✓	
Ginger	Zingiber	✓]				✓		
	Zingiber officinale	✓					✓	✓
	Amomum zingiber	✓						✓
	Rhizoma Zingiberi	✓						✓
	Sheng Jiang	✓						✓
	Shunthi	✓					✓	✓

	Sunth	✓						
	Sunthi	✓						
	Zingiberis Rhizoma	✓					✓	✓
	Zingiberis Siccatum Rhizoma	✓						✓
	Zinzeberis	✓						✓
	Zinziber Officinale	✓						✓
	Zinziber Officinalis	✓					✓	✓
	Gingerol	✓					✓	
	Zingerone	✓					✓	
	Shaogols	✓					✓	
	Zingiberene	✓					✓	
Ginkgo	Gingko	✓			✓	✓		
	Ginko	✓			✓	✓		
	Ginkoba		✓		✓	✓		
	Terpene Lactones	✓					✓	
	Flavone Glycosides	✓					✓	
	Maidenhair Tree	✓					✓	✓
	Ginkgetin	✓					✓	
	Fossil Tree	✓						✓
	Japanese Silver Apricot	✓						✓
Ginseng	Ashwagandha	✓			✓	✓		
	Ginseng			✓	✓			
	Panax Schinseng	✓						✓
	Insam	✓						✓
	Korean Panax	✓						✓
	Panax Quinquefolius	✓					✓	✓
	Panax Quinquefolia	✓						✓
	Panax Quinquefolium	✓					✓	✓
	Red Berry	✓						✓
	Eleutherococcus Senticosus	✓					✓	✓
	Acanthopanax Senticosus	✓						✓
	Hedera Senticosa	✓						✓
	Acanthopanax Obovatus	✓						✓
	Eleuthero	✓					✓	✓
	Eleutherococci Radix	✓						✓
	Eleutherococcus	✓					✓	✓
	Ussuri	✓						✓
	Wild Pepper	✓						✓
	CVT-E002	✓					✓	
	White Panax	✓					✓	
	Ginsenosides	✓					✓	
	Prince Seng	✓					✓	
	San-Qi	✓					✓	
Glucosamine	Glucosamin			✓	✓			
	Glucosomine			✓	✓			
	Glucosmaine			✓	✓			
	Clucosamine			✓	✓			
	Glucosame			✓	✓			
	Amino Monosaccharide	✓						✓

	Chitosamine Hydrochloride	✓						✓
	Mono-Sulfated Saccharide	✓						✓
	Sulfated Monosaccharide	✓						✓
	Sulfated Saccharide	✓						✓
	Regenasure		✓				✓	
	GreenGrown		✓				✓	
Lavender	Lavendar			✓	✓	✓		
	Lavander			✓	✓			
	Lavandula	✓				✓		
	Lavandula angustifolia	✓					✓	✓
	Lavandula latifolia	✓						✓
	Lavandula pubescens	✓						✓
	Lavandula stoechas	✓						✓
	Silexan		✓				✓	
Melatonin	Melatonin							
	N-Acetyl-5-Methoxytryptamine							
	5-Methoxy-N-Acetyltryptamine							
	Pineal Hormone							
Turmeric	Curcumin	✓						✓
	Curcuma	✓			✓		✓	✓
	Tumeric			✓				
	Curcuma Longa	✓						✓
	Curcumae Longae Rhizoma	✓						✓
	Curcuminoid	✓					✓	✓
	Indian Saffron	✓						✓
	Radix Curcumae	✓						✓
	Rhizoma Cucurmae Longae	✓						✓
	Safran Bourbon	✓						✓
	Haridra	✓					✓	✓
	Theracurmin	✓					✓	
	Tetrahydrocurcuminoids	✓					✓	
	Haldee Ghana	✓					✓	
	Turmerine	✓						✓
	Meriva		✓				✓	
	BCM-95		✓				✓	
	Longvida		✓				✓	
	CurcuWin		✓				✓	
Valerian	Valarian			✓	✓			
	Volarian			✓	✓			
	Valeriana Officinalis	✓					✓	✓
	Valeriana Edulis	✓						✓
	Valeriana wallichii	✓						
	Valeriana Sitchensis	✓						✓
	Baldrianwurzel	✓						✓
	Garden Heliotrope	✓						✓
	Valeriana Rhizome	✓						✓
	Valerianae Radix	✓						✓

	Valeriana Capitata	✓					✓	
	Valeriana Officinale	✓					✓	
	Valerenic Acid	✓					✓	