

Supplementary Table 1. Expanded terms for dietary supplements obtained through word embedding models. NF: not found. NA: not available

Dietary supplements	Word2vec						GloVe					
	Semantic variants	Brand names	Misspellings	Top 5 words in the returned list	Average precision	Mean Average Precision	Semantic variants	Brand names	Misspellings	Top 5 words in the returned list	Average precision	Means average precision
Calcium	NF	Citracal Calcarb Oysco	Calicum Calium Calcum Calcim Calcuim Calicium Calciu Calclium	Magnesium Phosphorus Calicum Calium Calcum	0.337	0.263	NF	Caltrate	NF	Carbonate Vitamin Magnesium Vit D3	0.077	0.236
Chamomile	Camomile	NF	Camomille	Lavender Lavender Licorice Remedy frankincense	0.063		Matricaria Camomile	NF	NF	Lavender Balm Lemon Dandelion Eucalyptus	0.082	
Cranberry	Cran	Ellura	Craberry	Prune Fibre Pomegranate Noni Cranapple	0.124		NF	NF	NF	Grape Juice Azo Probiotic Pyridium	NA	
Dandelion	Taraxacum*	NF	Dandilion	maca burdock astragalus tragacanth officinalis	0.067		Taraxacum	NF	NF	Cascara Beet Nettle Alfalfa Taraxacum	0.200	
Flaxseed	Flax Linseed	NF	NF	Flax Krill Fish Oregano Borage	0.577		Flax Linseed	NF	NF	Linseed Flax Omega Coenzyme Oil	1.000	
Garlic	NF	Garlique*	NF	Cinnamon Turmeric Ginseng Lecithin Oregano	NA		NF	Garlique	NF	Cinnamon Turmeric Oil Ginkgo Primrose	0.167	
Ginger	NF	NF	NF	Ale Gingerale Lime	NA		Zingiber	NF	NF	Ale Tea Glause	0.090	

				Licorice Tea					Lemon juice	
Ginkgo	Ginkgo Ginko	Ginkoba	NF	Ginko Ginko Ginkoba Ginseng Bilberry	1.00				Biloba Ginkoba Ginseng Ginkgo Cohosh	0.400
Ginseng	Ashwagandha	NF	Ginseng*	Resveratrol Astragalus Turmeric Curcumin Echinacea	0.077				Ginkgo Cohosh Primrose Garlic Siberian	0.167
Glucosamine	NF	NF	Glucosamin Glucosomine Glucosmaine Clucosamine Glucosame	MSM, Glucos, Complx, Methylsulfonylmethane Chondroitin	0.138				Chondroitin Chondroit Omega Ascorbic Chondr	NA
Lavender	NF	NF	Lavendar	Lavender Aromatherapy Diffuser Peppermint Coconut	0.553				Aromatherapy Peppermint, Chamomile, Oils Aroma	0.121
Melatonin	NF	NF	Melatonin	Lunesta Ambien Temazepam Ramelteon Doxepin	NA				Trazodone Hydroxyzine Lorazepam Clonazepam Ambien	NA
Turmeric	Curcumin Curcuma	NF	Tumeric	Curcumin Resveratrol Cinnamon Tumeric Astragalus	0.536				Curcumin Turmeric Curcuma Longa Glucosamine	1.000
Valerian	NF	NF	Valarian Volarian	Maca Dandelion Ashwagandha Valarian Ginseng	0.175				Wort Kava Tryptophan Cohosh Theanie	NA

Note: * indicates the term was found from the term list returned by word embedding models on another dietary supplement.