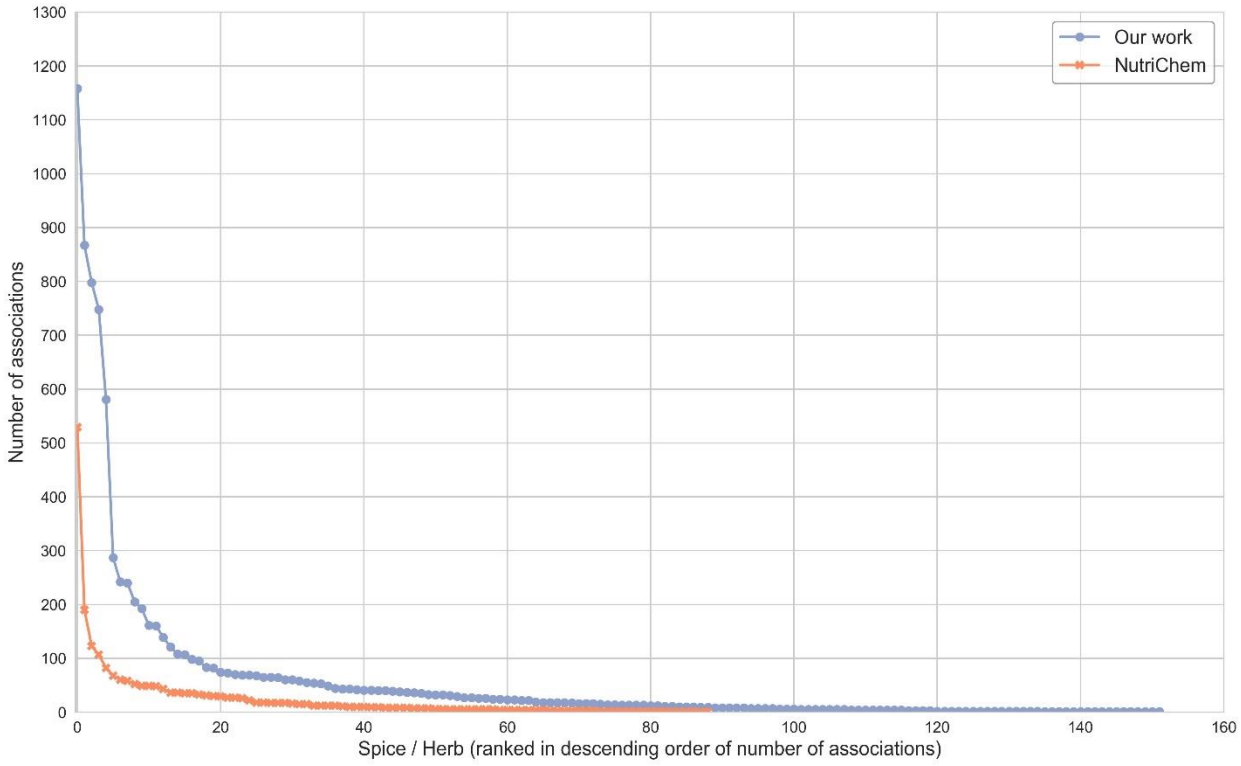
Annexure C

Supplementary Data for Chapter 7 and Chapter 8

C.1 COMPARISON WITH NUTRICHEM DATABASE



C.1.1. Comparison of the number of associations obtained for spices reported by our study with that of NutriChem [Jensen et al., 2014, 2015] indicating richer associations in our data.

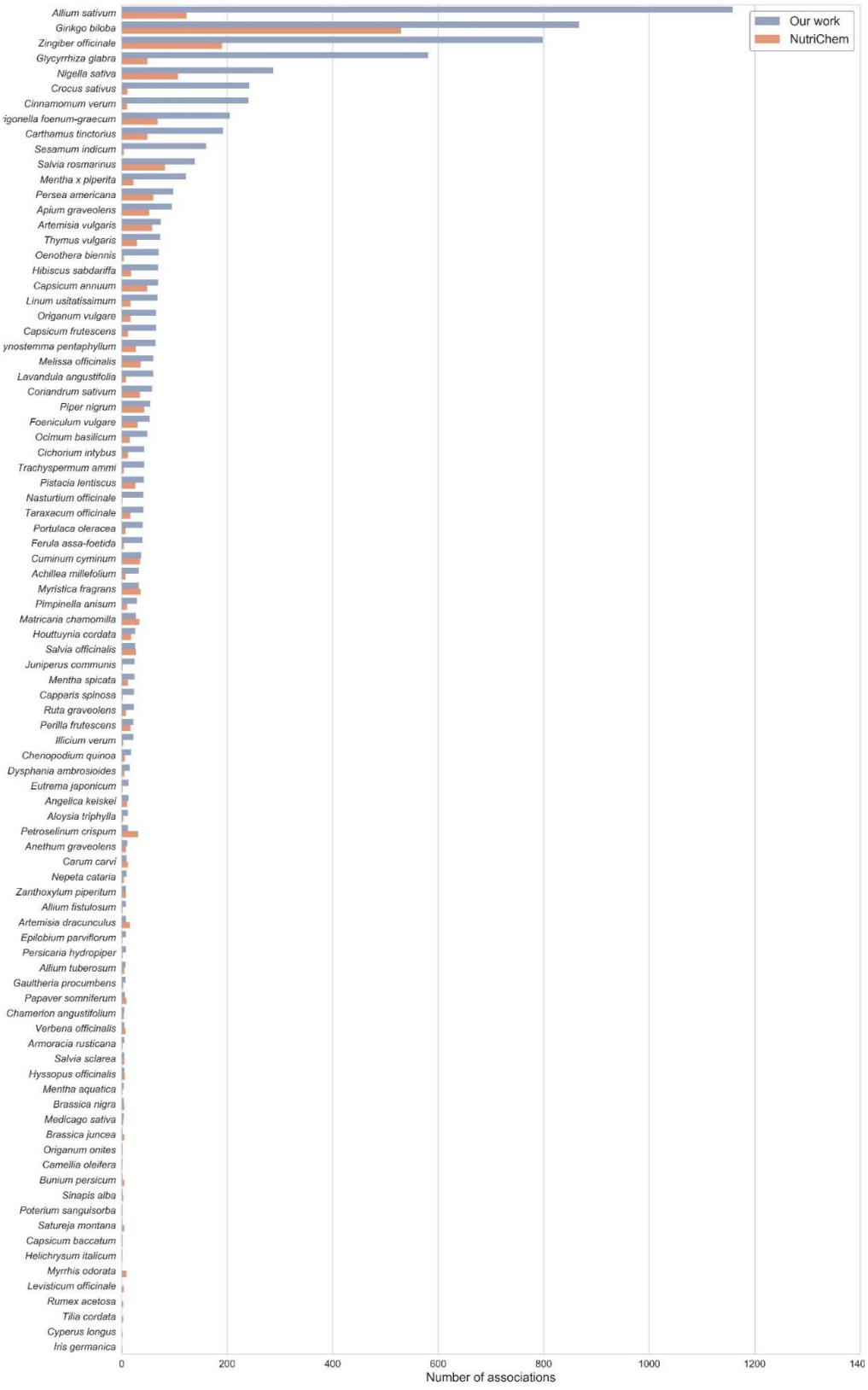


Figure C.1.2: Comparison of associations retrieved for 'individual spices' by NutriChem[Jensen et al., 2014, 2015] to those from our study, suggesting better depth/coverage in the latter.

C.2

Table C.2.1 Hyperparameters selected for the convolutional neural network Model 2 and Model 3.

Parameter	Model 2	Model 3
Filter sizes (f_z)	2,3,4,5	3,4,5
Number of filters (n_f)	150	150
Hidden units (n_h)	256	256
Dropout probability (p)	0.5	0.5

C.3

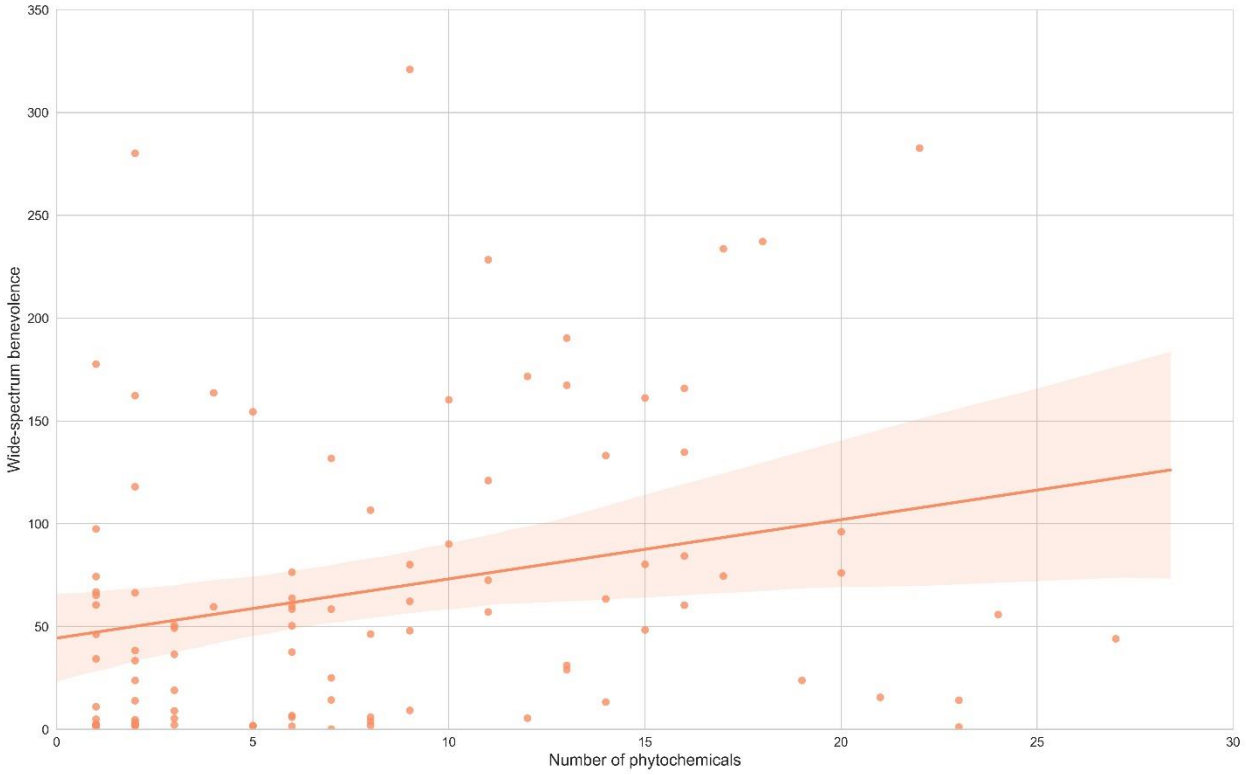


Figure C.3. Correlation between the number of phytochemicals in spices and their broad-spectrum benevolence. The data indicate that the broad-spectrum benevolence score of spices and their phytochemical repertoire are not correlated.

C.4

Table C.2 Top ten broad spectrum spices and number of MeSH disease categories and subcategories with which they were positively associated.

Sr. No	Scientific Name	Positively Associated 'Disease Categories'	Positively Associated 'Disease Sub-categories'	Total number of Positive Associations
1	*Allium sativum*	25	96	1092
2	*Ocimum tenuiflorum*	25	51	82
3	*Curcuma longa*	25	87	739
4	*Zingiber officinale*	24	81	795
5	*Nigella sativa*	24	66	278
6	*Cinnamomum verum*	23	55	220
7	*Ginkgo biloba*	23	82	830
8	*Helianthus annuus*	22	41	77
9	*Carthamus tinctorius*	22	49	182
10	*Glycyrrhiza glabra*	22	72	365