Supplementary Material

Supplement Table 1. Examined prompt headers for zero-shot ChatGPT. Sample variations of ChatGPT outputs are shown. The selected prompt header is bolded.

Prompt Header	Sample Prompt Content	Sample Output 1	Sample Output 2	Sample Output 3
Here I have a few paragraphs. Please extract the food entities from each paragraph. List out all food entities as a new line. Paragraph number should be listed to indicate where the entity was extracted from. Do not write anything in addition to extracted food terms.	turkey salad pickle saltine cracker, turkey mayonnaise mixed pizza, pizza	1. Turkey salad, pickle saltine cracker, mayonnaise 2. pizza	1. Turkey 1. Salad 1. Pickle 1. Saltine cracker 1. Mayonnaise 2. Pizza	• Turkey • Salad • Pickle • Saltine cracker • Mayonnaise • Pizza
I want to identify the food entities from a set of paragraphs below. Here are some instructions: 1) Repetitive food entities should be listed out multiple times. 2) Each entity should be listed on a new line. 3) After extracting from one paragraph, add a new line to the last identified food entity to indicate end.		turkey salad pickle saltine cracker mayonnaise pizza pizza	1. turkey 2. salad 3. pickle 4. saltine cracker 5. mayonnaise 6. pizza	1. turkey 2. salad 3. pickle 4. saltine cracker 5. mayonnaise 6. mixed 7. pizza 8. pizza
Identify the food terms from the set of paragraphs below. Paragraphs are separated by new line.		1. turkey salad 2. pickle 3. saltine cracker 4. mayonnaise 5. pizza	1. The turkey salad includes a combination of turkey, pickles, and saltine crackers, all mixed together with mayonnaise. 2. Pizza, pizza.	Paragraphs contain food terms, turkey salad, pickle, saltine cracker, turkey mayonnaise mixed, and pizza.

Supplement Table 2. food-NER results on patient-generated meal records grouped by entity type. The percent of identified entities is seen in parenthesis.

	FoodIE food-NER			ChatGPT food-NER		
Categories	**True Positive**	**False Negative**	**Partial**	**True Positive**	**False Negative**	**Partial**
General	973 (0.122)	6876 (0.863)	118 (0.015)	4611 (0.579)	3278 (0.411)	78 (0.010)
Abbreviation	4 (0.091)	40 (0.909)	0 (0.000)	20 (0.455)	24 (0.545)	0 (0.000)
Branded Food	7 (0.028)	236 (0.937)	9 (0.036)	154 (0.611)	91 (0.361)	7 (0.028)

Supplementary Table 3 Concept mapping performance of the different pipelines on patient-generated meal records. Whole numbers indicate the number of entities that could be considered as correctly mapped with different Levenshtein distance thresholds. The percentage of identified entities over the total number of entities in each category is presented in parentheses.

Pipeline		**Full Match**	**90% Match**	**80% Match**	**70% Match**	**60% Match**	**50% Match**	**40% Match**	**30% Match**	**20% Match**	**10% Match**
Manual Annotation	General	2831 (0.373)	2831 (0.373)	2834 (0.373)	2879 (0.379)	3052 (0.460)	3491 (0.460)	4289 (0.565)	5170 (0.681)	6875 (0.906)	7500 (0.988)
	Abbreviation	1 (0.023)	1 (0.022)	1 (0.022)	1 (0.022)	1 (0.022)	3 (0.068)	8 (0.181)	20 (0.454)	27 (0.613)	42 (0.954)
	Branded Food	3 (0.016)	3 (0.016)	3 (0.016)	3 (0.016)	4 (0.021)	21 (0.113)	36 (0.194)	62 (0.335)	87 (0.470)	183 (0.989)
FoodIE	General	741 (0.097)	741 (0.097)	752 (0.099)	819 (0.107)	1097 (0.144)	1565 (0.206)	2309 (0.304)	3867 (0.509)	6088 (0.802)	7138 (0.941)
	Abbreviation	0 (0.000)	0 (0.000)	0 (0.000)	0 (0.000)	0 (0.000)	1 (0.022)	5 (0.113)	13 (0.295)	27 (0.613)	31 (0.704)
	Branded Food	1 (0.005)	1 (0.005)	1 (0.005)	1 (0.005)	3 (0.016)	9 (0.048)	18 (0.097)	59 (0.318)	59 (0.318)	158 (0.854)
ChatGPT	General	2150 (0.283)	2150 (0.283)	2164 (0.285)	2254 (0.297)	2556 (0.336)	3197 (0.421)	4112 (0.542)	5618 (0.740)	7265 (0.957)	7583 (0.999)
	Abbreviation	2 (0.045)	2 (0.045)	2 (0.045)	2 (0.045)	2 (0.045)	5 (0.113)	11 (0.25)	28 (0.636)	41 (0.931)	44 (1)
	Branded Food	7 (0.037)	7 (0.037)	7 (0.037)	7 (0.037)	9 (0.048)	22 (0.118)	40 (0.216)	101 (0.545)	156 (0.843)	185 (1)