

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.		<ol style="list-style-type: none"> Turkey salad, pickle saltine cracker, mayonnaise pizza 	<ol style="list-style-type: none"> Turkey Salad Pickle Saltine cracker Mayonnaise Pizza 	<ul style="list-style-type: none"> Turkey Salad Pickle Saltine cracker Mayonnaise Pizza
<p>I want to identify the food entities from a set of paragraphs below. Here are some instructions:</p> <p>1) Repetitive food entities should be listed out multiple times.</p> <p>2) Each entity should be listed on a new line.</p> <p>3) After extracting from one paragraph, add a new line to the last identified food entity to indicate end.</p>	<p>turkey salad pickle saltine cracker, turkey mayonnaise mixed</p> <p>pizza, pizza</p>	<p>turkey</p> <p>salad</p> <p>pickle</p> <p>saltine cracker</p> <p>mayonnaise</p> <p>pizza</p> <p>pizza</p>	<ol style="list-style-type: none"> turkey salad pickle saltine cracker mayonnaise mixed pizza pizza 	
Identify the food terms from the set of paragraphs below. Paragraphs are separated by new line.		<ol style="list-style-type: none"> turkey salad pickle saltine cracker mayonnaise pizza 	<ol style="list-style-type: none"> The turkey salad includes a combination of turkey, pickles, and saltine crackers, all mixed together with mayonnaise. Pizza, pizza. 	<p>Paragraphs contain food terms, turkey salad, pickle, saltine cracker, turkey mayonnaise mixed, and pizza.</p>

Supplement Table 2. Food entity prediction results. Results in rows TP, FP, FN, and partial are counts of identified entities within each category. Lenient scores are calculated by merging partial match into the true positive group. The highest score across the methods for each metric is bolded.

Data	1000 FoodBase Recipes		Patient-generated Meal Records	
Method	FoodIE	ChatGPT	FoodIE	ChatGPT
True Positive	9167	8077	1236	5723
False Positive	1244	825	2303	2177
False Negative	4067	5602	8734	4295
Partial	610	165	148	100
Precision	0.881	0.882	0.349	0.724
Recall	0.697	0.708	0.124	0.571
F1	0.775	0.786	0.183	0.639
Lenient Precision	0.887	0.970	0.375	0.728
Lenient Recall	0.706	0.646	0.137	0.576
Lenient F1	0.786	0.775	0.201	0.643