



ANIC 2024
**ANNUAL NATIONAL
CONFERENCE**

**SHAPING
TOMORROW
TOGETHER**

JULY 14-16, 2024 | BOSTON, MASS.

Recipes Galore!

Unleashing the Power of Technology for
Culinary Creativity with AI & Beyond

Presented by: Melissa Manning, RDN





Affiliations:

Academy of Nutrition and Dietetics

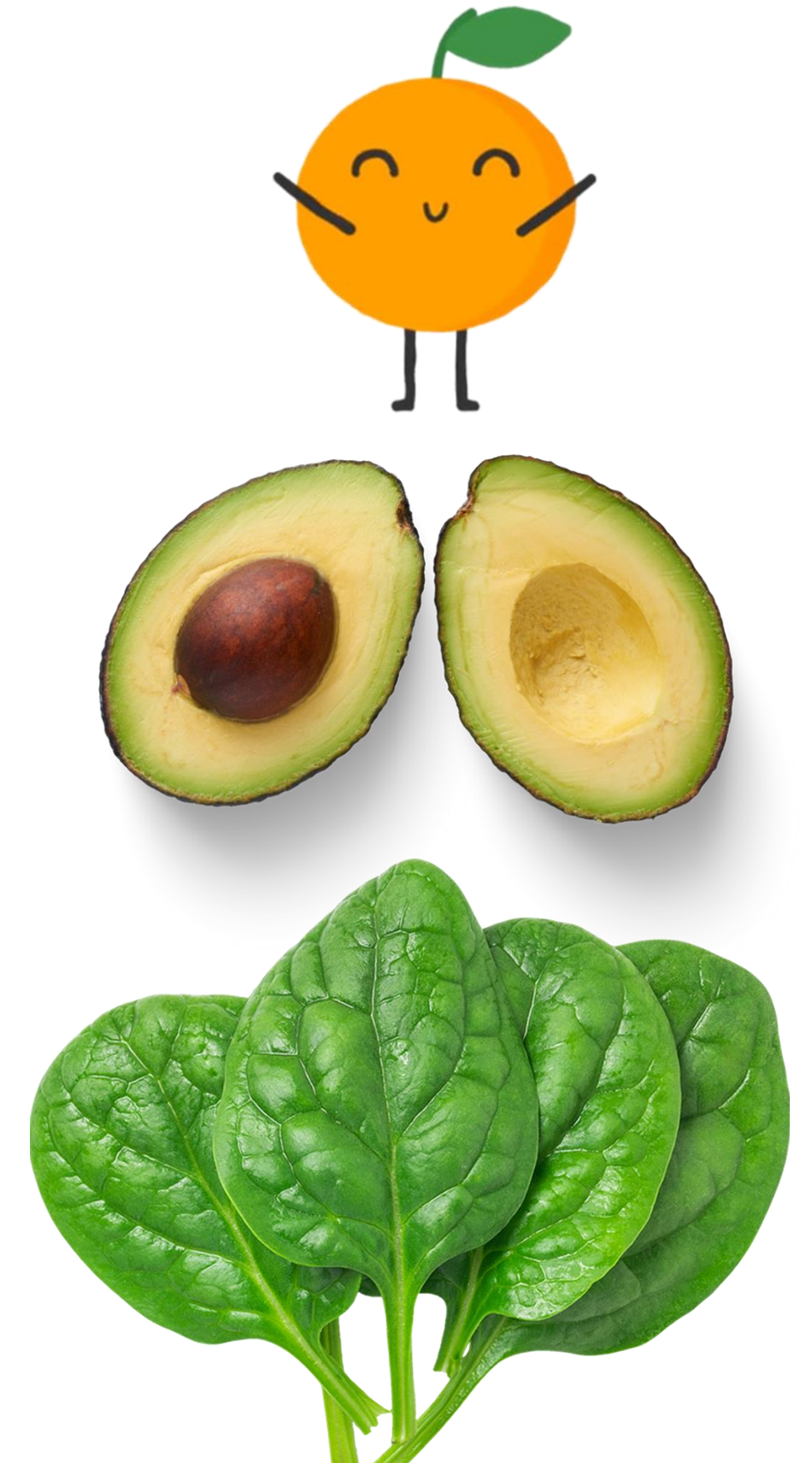
Acalanes Union High School District
Acorn Food Services
Alameda Unified School District
Anderson School District Five
Azusa Unified School District
ABC USD
Bloomington School District #271
Bonita Unified School District
Brea Olinda Unified School District
Buena Park Unified School District
Butteville Elementary
Carbon County School District #1
Chaffey Joint Union High School District
Colorado Springs School District 11
Delphic Elementary School
East Whittier City School District

EMS LINQ – Titan Menu Planning

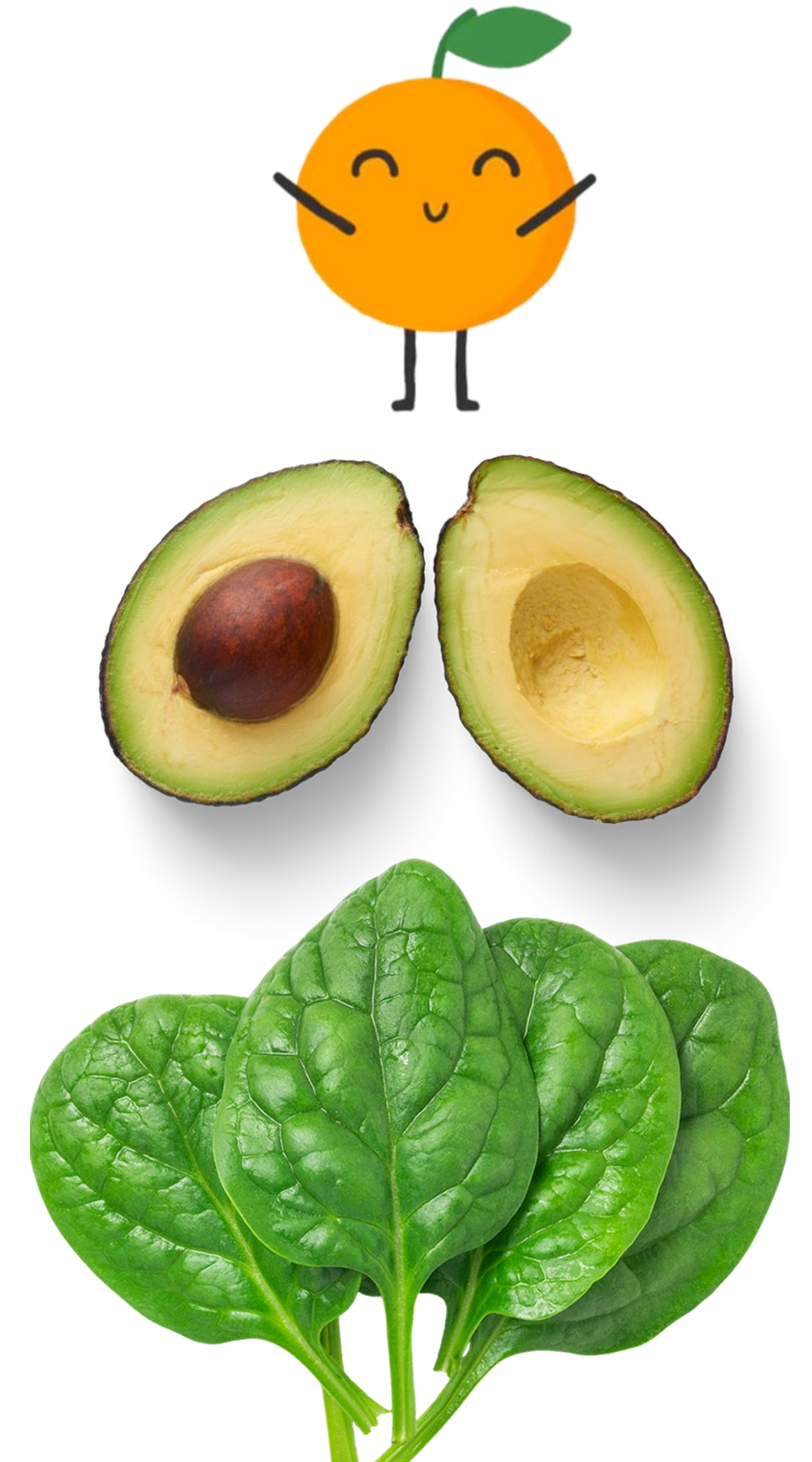
Encore Education Corporation
Fleming County Schools
Fontana Unified School District
Fullerton School District
Glendora Unified School District
Harvest Food Group
Health-e Pro
Huntington Culinary, Inc
Lodi Unified School District
Inglewood Unified School District
Los Gatos Union School District
Junction Elementary School District
LunchAssist Training and LunchAssist AR Bootcamp
Mad River Local Schools
Merced City School District
Millbrae School District
Montebello Unified School District
Moreno Valley Unified School District
Mt. Diablo Unified School District
North Attleborough
Norwalk-La Mirada Unified School District
Oakdale Joint Unified School District

Oakland Unified School District
Pasadena USD
Placentia-Yorba Linda Unified SD
Ripon Unified School District
San Francisco Unified School District
Seeley Union School District
Siskiyou Union High School District
South Pasadena Unified School District
Stanfield School District
Sukhi's Indian Food
Sunrise Produce
Temecula Valley USD
Travis Unified School District
The LunchMaster
Walnut Valley USD
Weld RE-4 School District
West Covina Unified School District
Willows USD
Yosemite Unified School District
Yreka Union School District

What school recipes
are your faves?



Where did you get
the ideas for these
recipes?



Recipes galore!

OVERVIEW



- Sources of recipes - So MANY!
- Factors to consider when searching for recipes
- The Basics: NSLP recipe websites
- Popular recipes from social media & websites
- My fave source of standardized recipes for 100 servings
- Choose your own adventure, recipe style
- Secret Sauce: BAM! Kick it up a notch with AI with free idea lists, how-to's, and prompts

Traditional Sources of Recipes:

- NSLP WEBSITES 
- SOCIAL MEDIA 
- COOKBOOK ARCHIVES 
- MENU SOFTWARE 
- CONSULTANTS 
- FAMILY RECIPES 
- MILITARY 



Soliciting Recipes:

- RECIPE CONTESTS 
- ADVISORY GROUPS 
- FOCUS GROUPS 
- SURVEYS 
- COOKING COMPETITIONS 
- RECIPE DROPBOX 
- SCHOOL CULINARY CLASS

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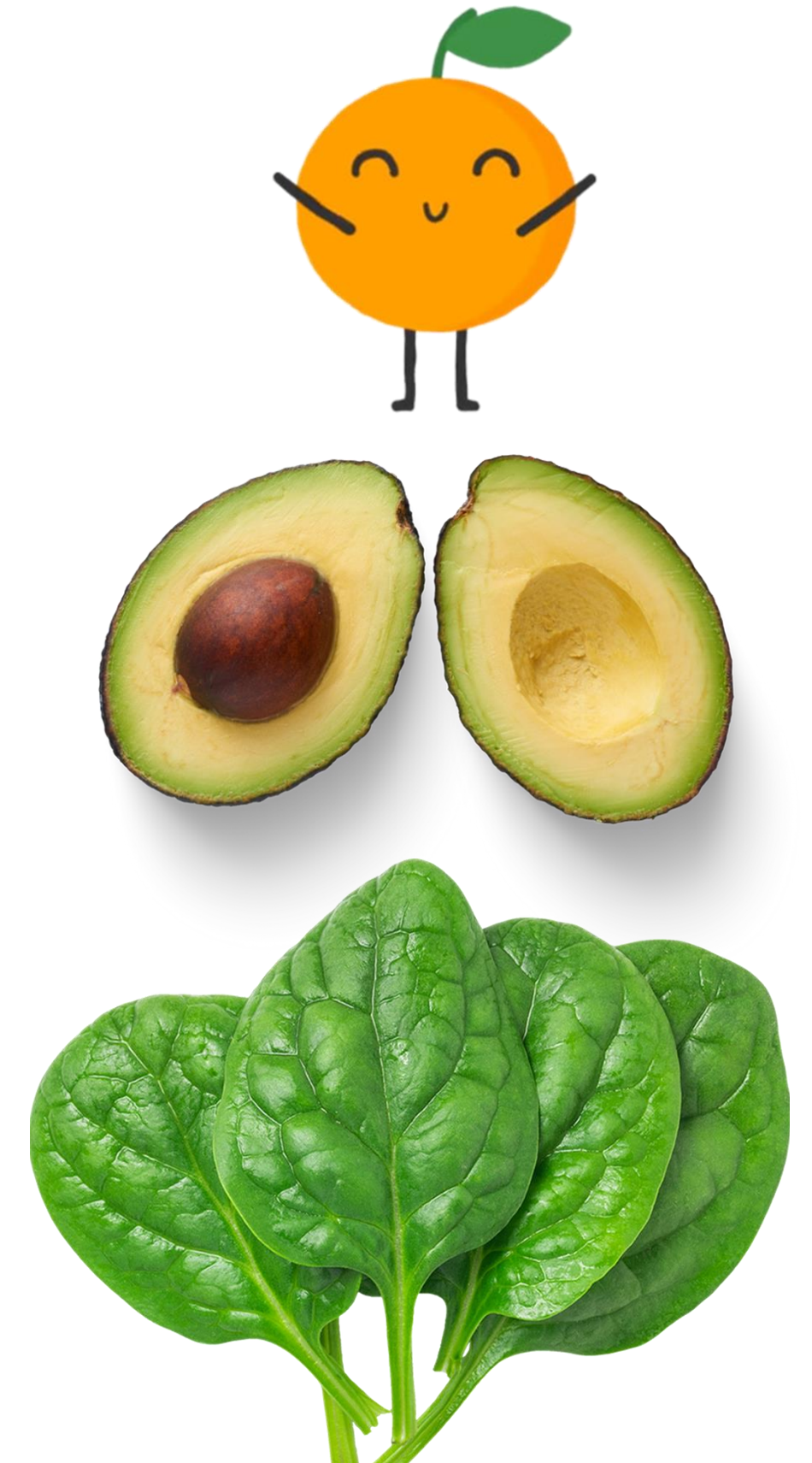
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ARTIFICIAL INTELLIGENCE

What are the
ingredients to a
great
school recipe?



RECIPE CHECKLIST

- *Will this recipe be popular? Or is it served with a specific intention in mind?*
- *Do I have the necessary equipment?*
- *Are the ingredients in the recipe easily to obtain?*
- *Is the visual appearance of the product acceptable?*
- *Is the flavor of the recipe one that students might enjoy?*



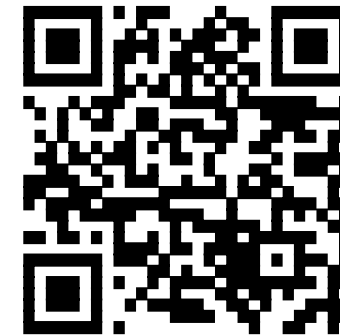
RECIPE CHECKLIST

- *Is the labor time to make the recipe within reasonable time frames?*
- *Do employees possess the skills to prepare this item?*
- *What training will be required?*
- *Is the recipe within nutrition guidelines/goals?*



Does the recipe meet enough criteria to continue?

The Basics: Great NSLP recipe websites:



Most popular social networks for US Teens:

- *TikTok – 38% of teens*
- *Snapchat – 28%*
- *Instagram- 23%*



TikTok Philly Cheesesteak Smashburger Tacos:
3.9 million views

Pastachips:
28 million views

Cafeteria Noodles:
3.4 million views

Instagram recipes:
Cookie Baked Oatmeal
159,143 likes

Homemade garlic chili oil:
27.5 million views

HAVE YOU SEEN THESE GREAT MILITARY RECIPE BOOKS?

Armed Forces Recipe Service

UNITED STATES ARMY
TM 10-412

UNITED STATES NAVY
NAVSUP Publication 7

UNITED STATES AIR FORCE
AFJMAN 34-606 Volume I and Volume II

UNITED STATES MARINE CORPS
MCO P10110.42B

Stock No. 0530-LP-188-7302



Choose Your Own Adventure, Recipe Style

1

Choose the Meat / Meat Alt

2

Choose the Grain

3

Choose the Flavor



Choose Your Own Adventure: **Yogurt Parfait**

1

Choose the Meat / Meat Alt

2

Choose the Grain

3

Choose the Flavor



AND THE FINAL PIECE TO THE SECRET SAUCE



THIS BLOWS MY MIND!

Chat GPT by Open AI

"I am presenting at a national conference on the National School Lunch Program as a dietitian. The presentation is on Creating Recipes for the National School Lunch program using AI. The presentation is 45 minutes and geared toward people who are new to AI. What important takeaways should I include?"

[Video 1]

Chat GPT – AI in Recipe Creation

What is AI?

- *Technologies that enable machines to learn from data, identify patterns, and make decisions with minimal human intervention.*

What are its limitations?

- *Complexity of USDA regulations*
- *Privacy in data handling*
- *What you put into it is what you get out of it*
- *It tells you what you want to hear*



Did you know? GPT stands for Generative Pre-trained Transformer.

Chat GPT – Benefits of Using AI in Recipe Development

Chat GPT says...

Efficiency

- *AI can analyze vast amounts of data quickly to suggest nutritious recipes that meet specific dietary guidelines and preferences.*

Personalization:

- *AI can tailor recipes based on dietary restrictions, cultural preferences, and nutritional needs of students.*

Consistency:

- *Recipes developed through AI are consistent and reproducible, ensuring uniform quality across different school cafeterias.*



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Marketing:

- *From creative descriptions and amazing images to entire marketing and social media plans, Chat GPT is a marketing genius!*



Practical Tips for Getting Started

- Include demographics:
 - Age/Grade level
 - Cultural and ethnic background
 - Dietary restrictions and allergies
 - Budget
 - Geographic location
 - Ingredients, seasonal availability
 - Health and wellness trends and goals
 - Feedback and preferences (student, NAC, staff, board, parent, etc)



Practical Tips for Getting Started

- Specify output: What can GPT do for you?
 - Preparation and cooking times
 - Equipment and resources needed
 - Serving instructions
 - Storage and shelf life
 - Food safety and handling, including CCPs
 - Allergen management strategies, including steps to prevent cross-contamination
 - (recipe ideas, recipe ingredients, recipe marketing descriptions, recipe photos)
- Include budget and limitations on ingredients or cooking methods
- Ask questions



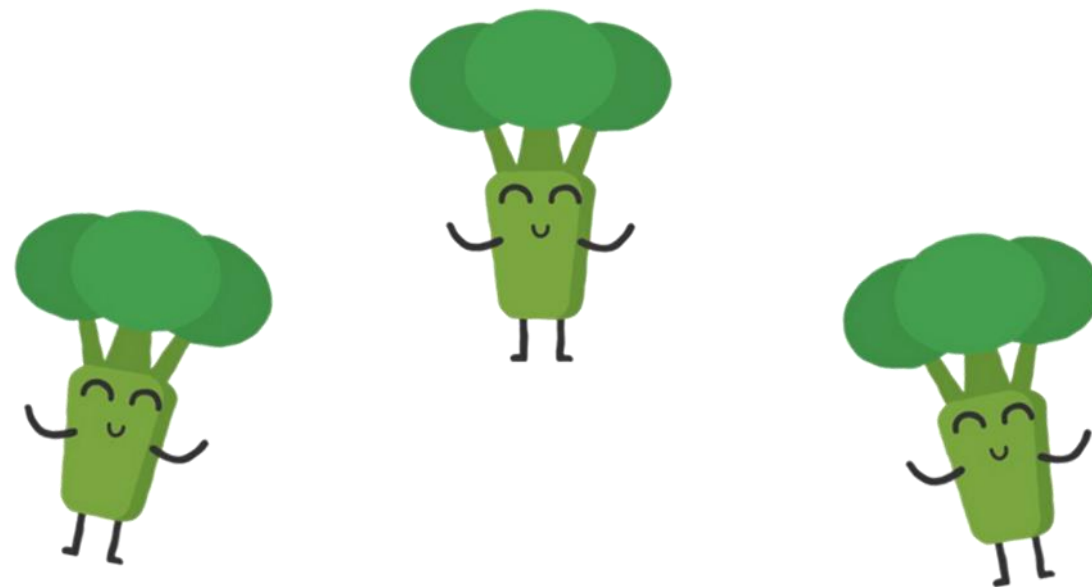
Creating Nutritious Recipes with AI

1. AI creates recipes that are balanced nutritionally according to USDA guidelines
... note – addresses nutrients, but not specifically addressing the meal pattern.
2. AI can provide ideas on adapting recipes to meet nutritional goals:
... reduce sodium
... gluten free and special diets
... run nutritional analysis to provide general calories, saturated fat, and sodium



How I use Chat GPT

AI can be used successfully in recipe creation: Demonstration – Orange chicken



Key takeaways:

- When looking for popular, marketable recipe ideas, harness the power of social media.
- When looking for great standardized recipes and recipe instructions in foodservice quantities, military recipes take the cake.
- When looking for standardized recipes with meal pattern crediting, USDA, state agencies, and SNA are reliable sources.
- When looking to streamline operations and inventory, use the Choose Your Own Adventure method to mix limited ingredients into unlimited choices.
- When it's time to kick it up a notch and problem solve challenging situations like drawing down excess inventory or marketing ideas, it's time to go next level and harness the power of Artificial Intelligence.



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THANK YOU!

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on the new #ANC24 app.

