

# n8n Workflow - Personal Weekly Meal Plan Generator

## What it does:

Generate weekly meal plan with recipes and shopping lists for the meal plan based on user inputs

## Why choose to build it:

There are people are struggling with what and how to eat to achieve their personal goals, and if they do research every week, that will cost a lot of time and efforts

## Why automating this process is logical and useful:

1. Manually create personal meal plan is time consuming, this workflow saves time
2. Making meal plan is repetitive but with different contents, ai agent could do exactly the same thing
3. Provide a clear document to track food

## Who benefits from it:


1. Anyone are busy with lives, have no time to think about what to eat and buy, but want to eat healthy and save time and money for their meal preparation
2. Fitness coaches
3. Meal-prep companies
4. Influencers & content creators

## Where it would be applied in real life:

1. Health & fitness coaching programs in any platforms
2. Family planning
3. Social media

## Step 1 Input User Data

- **Google Sheet Node:** A sheet links to a meal plan preferences Google Form. Stored user data.


**User Input Data**
Fetch Test Event

Parameters
Settings
Docs

Credential to connect with

n8n Meal Plan Generator

Poll Times

Mode

Every Minute

Add Poll Time

Document

From list
Meal Preferences & Nutrition ...

Sheet

From list
Form Responses 1

Trigger On

Fixed Expression

Row Added

Options

Value Render

Formatted

Add option

## 1. Options:

- Value Render: Formatted
  - To structure the Timestamp output**
- Sort:** Sort all the users input from the Google Sheet node and order them with TimeStamp the time updated) in descending order

↕↑ Sort User Data Based o...

Execute step

Parameters

Settings

Docs

Type

Fixed Expression

Simple

Fields To Sort By

Field Name

Timestamp

Enter the field name as text

Order

Descending

Add Field To Sort By


Options


No properties

Add Field

- Field Name: Timestamp
  - Order Timestamp fields
- Order: Descending
  - The newest item will be listed first on the top to be chosen

- **Limit:** Limit to get only 1 (the newest one) data row from Google sheet to process


 **Limit User Data** Execute step

**Parameters** Settings Docs 

Max Items

1

Keep


First Items 


1. Max Items: 1
    - Only past 1 newest item (avoid repetition)
  2. Keep: First Items
    - Get the newest records
- **Week Tag:** Codes to help to generate week periods for the plan, which are convenient for users to catch up
1. Generate updated week period for documents that with current data

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## Step 2 Generate Meal Plan


- **AI Agent:** AI agent with Google Gemini chat model to generate weekly meal plan details



 AI Agent Meal Plan

 Execute step

Parameters


Settings

Docs 

 Tip: Get a feel for agents with our quick [tutorial](#) or see an [example](#) of how this node works 

Source for Prompt (User Message) : 

Fixed Expression

Define below 

Prompt (User Message)

Parameter: "prompt"

fx

=Create a simple 7-day meal plan (break fast, lunch, dinner, snacks) honoring:  
- Name: {{ \$json['Your Name ' ] }}  
- Career/Lifestyle: {{ \$json['Your Career ' ] }}  
- Diet Type: {{ \$json['What Type of Diet ' ] }}



Require Specific Output Format

☐

Enable Fallback Model

☐

Options


System Message

You are a nutrition planning assistant.

Chat Model \*



Memory

Tool


 Chat Model

[Parameters](#)
[Settings](#)
[Docs](#)

Credential to connect with
 

Google Gemini(PaLM) Api account
 



Model
 

models/gemini-2.5-flash
 

Options
 

Sampling Temperature
 

0.8

Add Option
 

### 1. AI Model: Google Gemini

- Add options
- Sampling Temperature: 0.8 (the larger the number, the higher randomness ----> to help ai agent to generate different contents each execution although it may have the same user inputs)

### 2. Prompt:


- Create 7-day meal plan based on user inputs
- Set it generate different meal plan for each execution (even though it has the same user inputs) (not duplicated)

### 3. System Message:

- Extra information to structure output, such as not changing the week tag input, let ai agent act as nutrition planning assistant, and check the java codes to avoid errors
- **Code Format Meal Plan:** To structured the contents from AI agent to make it look better in the document

## Step 3 Generate Recipes

- **AI Agent:** AI agent with Google Gemini chat model to generate recipes and shopping list

 **AI Agent Recipes**

Execute step

Parameters

Settings

Docs

Tip: Get a feel for agents with our quick [tutorial](#) or see an [example](#) of how this node works

Source for Prompt (User Message)

Define below

Prompt (User Message)

fx

You are a registered-dietitian-level recipe generator. Create simple, budget-conscious recipes for each meal in a 7-day plan. Respect allergies, restrictions, diet type, disliked foods, time

Require Specific Output Format

Enable Fallback Model

Options


System Message

You must output STRICT, valid JSON only.

Chat Model \*

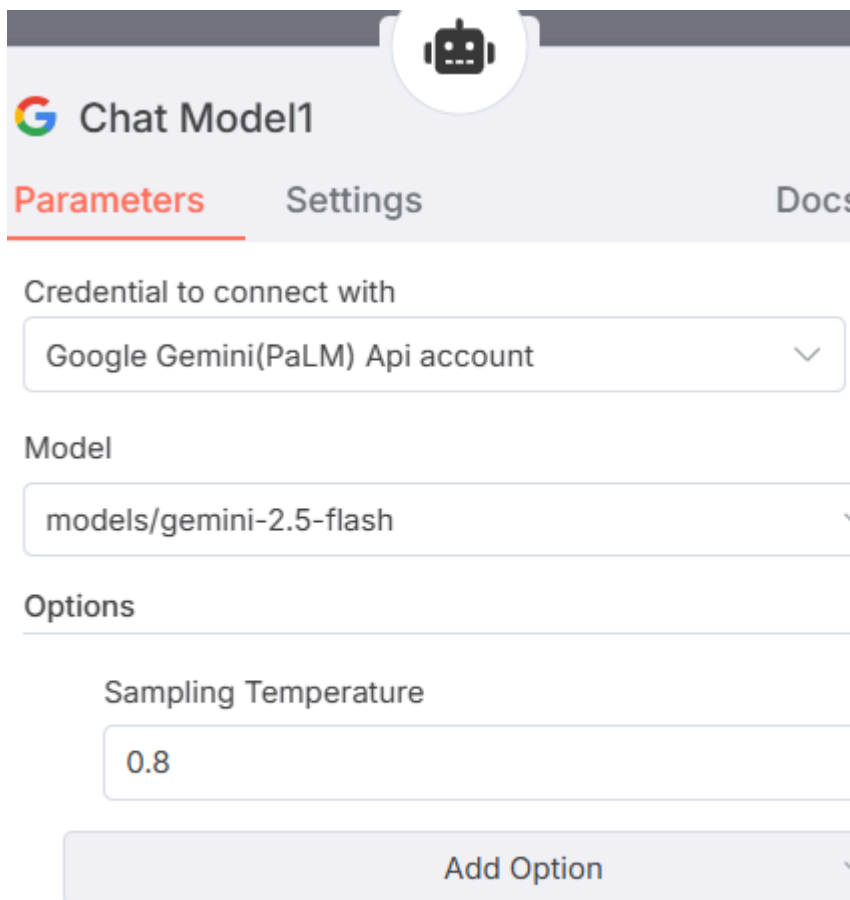
Memory

Tool



+

+



Chat Model1

Parameters Settings Docs

Credential to connect with

Google Gemini(PaLM) Api account

Model

models/gemini-2.5-flash

Options

Sampling Temperature

0.8

Add Option

#### 1. AI Model: Google Gemini

- Add options
- Sampling Temperature: 0.8 (the larger the number, the higher randomness ----> to help ai agent to generate different contents each execution although it may have the same user inputs)

#### 2. Prompt:

- Create recipes and shopping lists according to the meal plan
- Set it generate different ingredients each time

#### 3. System Message:


- Instruct ai gent to output strict java codes to lower possibility of errors
- **Code Format Recipes:** To structured the contents from AI agent to make it look better in the document

## Step 4 Send the Meal Plan

- **Copy file (Google Drive):** Since we have the meal plan template in the google drive, we use this node to to copy the template to pass it to the next step to fill in user information




- **Update a document (Google Doc):** Update user input to template

 Update a document

Execute step

Parameters


Settings

Docs 

Doc ID or URL

*fx*

{{ \$json.id }}



Simplify

:

Fixed


Expression

☒

Actions


Object

Text



Action

Find and Replace Text




Old Text

{{Name}}

New Text

*fx*


{{ \$('Limit User Data').item.json['Your Name ' ] }}




Match Case

☐

1. **Action: Find and Replace Text**
  - Find the original text in the copy template and replace it with ai agent contents and user input info
  - **Download file:** Convert and download the google doc meal plan file to pdf for user
  - **Send a message (Gmail):** Send the finalized meal plan to user with message and subject



# Send a message


Execute step

Parameters
Settings
Docs

Credential to connect with

n8n Meal Plan Gmail

Resource

Message

Operation

Send

To

fx

```
{{ $('Limit User Data').item.json['Your Email ' ] }}
```

Subject

fx

```
Weekly Meal Plan ({{ $('Codes Format Meal Plan').item.json.WeekPeriod }}) - {{ $('Limit User Data').item.json['Your Name ' ] }}
```

Email Type

HTML

Message

fx

```
Hi,  
  
🎉 Your personalized 7-day meal plan is now ready!
```

- To (email):
  - User input email from previous step
- Subject:
  - Include week tag codes: show week dates