

This shows the instruction given to the agent.

The screenshot displays the IBM watsonx Agent Lab interface. The top navigation bar includes the IBM watsonx logo, an 'Upgrade' button, a help icon, a notification bell, and a user profile for 'Sutapa Bhuyan's Account' in 'Dallas'. The main header shows the project path 'Projects / Nutrition\_Agent / watsonx Agent' and a 'Share feedback' button. The interface is divided into two main sections: 'Build' and 'Agent preview'.

**Build Section:**

- Model: granite-3-3-8b-instruct
- LangGraph and ReAct frameworks are selected.
- Instructions:**

you are helpful nutrition ai agent.  
Ask the user for their age, gender, weight, height, dietary preferences (e.g., vegetarian, keto), allergies, medical conditions (e.g., diabetes, PCOS), cultural preferences, and fitness goals (e.g., weight loss, muscle gain). Store the responses securely and use them to personalize future suggestions.  
Generate a daily or weekly meal plan that aligns with the user's profile: dietary preferences, medical conditions, and fitness goals. Ensure nutritional balance (macros + micronutrients) and cultural relevance. Include breakfast, lunch, dinner, and optional snacks with calorie counts and prep details.  
When a user inputs a food they dislike, are allergic to, or want a healthier version of, suggest smart alternatives. For example, if a user inputs "white rice", you might suggest "quinoa" or "cauliflower rice" and explain why the alternative is healthier.  
Whenever a recommendation is made, provide a short, clear explanation such as:  
- "This food is high in fiber, which supports digestion."  
- "This alternative has a lower glycemic index, which is better for diabetes."  
Offer contextual, science-backed reasons to help the user make informed decisions.  
If a user uploads a food photo or grocery label, extract the food item name using image recognition. Cross-reference the item with a nutrition database to determine if it's healthy based on the user's profile. Respond with nutritional info and suggestions if needed.  
If a user says they disliked a meal, were still hungry, or experienced a symptom, adjust future recommendations accordingly. Ask follow-up questions like: "Would you prefer a lighter/heavier meal next time?" or "Should I avoid this ingredient in future plans?"
- [Advanced configuration](#)

**Agent preview Section:**

- SB** You: 09:00 PM  
Generate a 1-day meal plan for a 21-year-old female, non-vegetarian, with PCOS, who wants to lose weight. She dislikes tofu and prefers Indian cuisine. Make sure meals are low glycemic and high in protein.
- watsonx Agent** 09:00 PM  
I apologize for the inconvenience. Let's create a personalized meal plan for a 21-year-old female with PCOS who is non-vegetarian, dislikes tofu, prefers Indian cuisine, and aims for weight loss. We'll ensure the meals are low glycemic and high in protein.
- Meal Plan**
- Breakfast: Chickpea Curry with Spinach (Chana Saagu)**
  - Ingredients:** Chickpeas, spinach, onions, tomatoes, garlic, ginger, spices (turmeric, cumin, coriander, garam masala).
  - Calories:** ~350
  - Protein:** ~18g
  - Glycemic Load:** Low
  - Explanation:** Chickpeas are an excellent source of protein and fiber, which helps control blood sugar levels and promotes satiety. Spinach adds essential vitamins and minerals.
- Mid-Morning Snack: Greek Yogurt with Flaxseeds**

At the bottom of the 'Agent preview' section, there is a text input field with the placeholder 'Type something...' and a send button.

Following screenshots are the response of the agent when it is asked to generate a 1-day meal plan for a 21-year old female, non-vegetarian, with PCOS, who wants to lose weight.

The screenshot displays the IBM watsonx Agent interface in a web browser. The browser tabs include 'Agent Lab (beta) — Docs | IBM', 'Agent Lab — Nutrition\_Agent', 'watsonx Agent — Nutrition\_A', 'Settings | IBM watsonx', and 'AI nutrition assistant'. The address bar shows the URL: `dataplatfom.cloud.ibm.com/ml-runtime/deployments/b04b6555-04fb-4450-8bcc-b3c774efaae2/chat?space_id=d200b3d4-8ce7-438a-992b-5fd704a8e353&con...`. The page header includes the IBM watsonx logo, an 'Upgrade' button, a help icon, a notification bell, and user information for 'Sutapa Bhuyan's Account' in 'Dallas'.

The main content area shows the deployment path: 'Deployment spaces / Nutrition\_Agent / watsonx Agent /'. The 'watsonx Agent' is shown as 'Deployed' and 'Online'. There are three tabs: 'API reference', 'Test', and 'Preview' (which is active). A 'New chat +' button is located on the right.

The chat history shows a user message at 09:10 PM: 'Generate a 1-day meal plan for a 21-year-old female, non-vegetarian, with PCOS, who wants to lose weight. She dislikes tofu and prefers Indian cuisine. Make sure meals are low glycemic and high in protein.' The agent's response at 09:10 PM states: 'To create a personalized meal plan for a 21-year-old female with PCOS who is non-vegetarian, dislikes tofu, prefers Indian cuisine, and aims for weight loss, I'll ensure the meals are low glycemic and high in protein. Here's a sample 1-day meal plan: **Breakfast: Chickpea Curry with Spinach (Chana Saagu)**'. The agent lists ingredients (Chickpeas, spinach, onion, tomatoes, ginger, garlic, spices, olive oil, salt, and pepper), calories (~350), protein (~15g), glycemic load (Low), and notes that the meal is high in protein and fiber to help manage PCOS symptoms and support weight loss.

The right sidebar, titled 'About this deployment', contains the following information:

- Name:** watsonx Agent
- Description:** Change this description to reflect your particular agent
- Deployment Details:**
  - Deployment ID: b04b6555-04fb-44...
  - Serving name: No serving name.
  - Software specification: runtime-24.1-py3.11
  - Hardware specification: Extra extra small: 1 CPU and 2 GB RAM
  - Copies: 1
- Tags:** wx-agent
- Associated asset:** watsonx Agent (ac51acdd-7212-4cad-b93b-8d1d7cd25b7e)
- Last modified:** 47 seconds ago

Agent Lab (beta) — Docs | IBMwatsonx Agent — Nutrition\_Awatsonx Agent — Nutrition\_ASettings | IBM watsonxAI nutrition assistant

dataplatfom.cloud.ibm.com/ml-runtime/deployments/b04b6555-04fb-4450-8bcc-b3c774efaae2/chat?space\_id=d200b3d4-8ce7-438a-992b-5fd704a8e353&con...

IBM watsonxUpgradeSutapa Bhuyan's AccountDallasSB

Deployment spaces / Nutrition\_Agent / watsonx Agent /

watsonx Agent

DeployedOnline

API referenceTestPreview

New chat +

Mid-Morning Snack: Greek Yogurt with Berries

- Ingredients: Greek yogurt (1 cup plain, full-fat), mixed berries (1/2 cup), a sprinkle of chia seeds.
- Calories: ~200
- Protein: ~20g
- Glycemic Load: Low
- Greek yogurt is high in protein and beneficial bacteria, which can aid digestion and support weight loss.

Lunch: Grilled Chicken Tikka with Cucumber Raita

- Ingredients: Chicken breast (4 oz grilled), cucumber (1/2 cup), plain yogurt (1/2 cup), mint (a handful), salt, and pepper to taste.
- Calories: ~400
- Protein: ~35g
- Glycemic Load: Low
- Chicken provides lean protein, and cucumber raita adds hydration and probiotics.

Afternoon Snack: Roasted Almonds

Type something...

About this deployment

Name

watsonx Agent

Description

Change this description to reflect your particular agent

Deployment Details

Deployment ID: b04b6555-04fb-44...

Serving name:

No serving name.

Software specification:

runtime-24.1-py3.11

Hardware specification:

Extra extra small: 1 CPU and 2 GB RAM

Copies:

1

Tags

wx-agent

Associated asset

watsonx Agent

ac51acdd-7212-4cad-b93b-8d1d7cd25b7e

Last modified

47 seconds ago

Agent Lab (beta) — Docs | IBMwatsonx Agent — Nutrition\_ASettings | IBM watsonxAI nutrition assistant

dataplatfom.cloud.ibm.com/ml-runtime/deployments/b04b6555-04fb-4450-8bcc-b3c774efaae2/chat?space\_id=d200b3d4-8ce7-438a-992b-5fd704a8e353&con...

IBM watsonxUpgrade?Sutapa Bhuyan's AccountDallasSB

[Deployment spaces](#) / [Nutrition\\_Agent](#) / [watsonx Agent](#) /

watsonx Agent

DeployedOnline

API referenceTestPreview

New chat +

Afternoon Snack: Roasted Almonds

- Ingredients: Almonds (1 oz).
- Calories: ~160
- Protein: ~6g
- Glycemic Load: Low
- Almonds are a great source of healthy fats, protein, and fiber, promoting satiety and weight management.

Dinner: Palak Paneer with Brown Rice

- Ingredients: Paneer (4 oz), spinach (2 cups), paneer spices (cumin, coriander, turmeric), brown rice (1 cup cooked).
- Calories: ~550
- Protein: ~30g
- Glycemic Load: Low
- Paneer offers a good amount of protein, and brown rice provides fiber and additional nutrients compared to white rice.

Evening Snack (if needed): Mixed Nuts

Type something...

About this deployment

Name

watsonx Agent

Description

Change this description to reflect your particular agent

Deployment Details

Deployment ID: b04b6555-04fb-44...

Serving name: No serving name.

Software specification: runtime-24.1-py3.11

Hardware specification: Extra extra small: 1 CPU and 2 GB RAM

Copies: 1

Tags

wx-agent

Associated asset

watsonx Agentac51acdd-7212-4cad-b93b-8d1d7cd25b7e

Last modified

47 seconds ago

Agent Lab (beta) — Docs | IBMwatsonx Agent — Nutrition\_ASettings | IBM watsonxAI nutrition assistant

dataplatfom.cloud.ibm.com/ml-runtime/deployments/b04b6555-04fb-4450-8bcc-b3c774efaae2/chat?space\_id=d200b3d4-8ce7-438a-992b-5fd704a8e353&con...

IBM watsonxUpgrade?Sutapa Bhuyan's AccountDallasSB

Deployment spaces / Nutrition\_Agent / watsonx Agent /

watsonx Agent

DeployedOnline

API referenceTestPreview

New chat +

• Paneer offers a good amount of protein, and brown rice provides fiber and additional nutrients compared to white rice.

**Evening Snack (if needed): Mixed Nuts**

- Ingredients: Mixed nuts (1/4 cup).
- Calories: ~170
- Protein: ~5g
- Glycemic Load: Low
- Nuts are a great source of healthy fats and protein, helping to keep you satiated.

This meal plan totals approximately 1830 calories, with a good balance of macronutrients and a focus on low glycemic index foods to support weight loss and manage PCOS symptoms. Please adjust portion sizes as needed to meet your specific calorie requirements.

Remember, individual nutritional needs can vary, so it's essential to monitor how your body responds to this plan. If you experience any discomfort, bloating, or other symptoms, please inform me so I can adjust future recommendations accordingly.

S

You 09:11 PM

Type something...

About this deployment

Name

watsonx Agent

Description

Change this description to reflect your particular agent

Deployment Details

Deployment ID: b04b6555-04fb-44...

Serving name:

No serving name.

Software specification:

runtime-24.1-py3.11

Hardware specification:

Extra extra small: 1 CPU and 2 GB RAM

Copies:

1

Tags

wx-agent

Associated asset

watsonx Agent

ac51acdd-7212-4cad-b93b-8d1d7cd25b7e

Last modified

47 seconds ago

This shows the response of the agent when the user said she does not like chickpeas.

The screenshot displays the IBM watsonx Agent interface in a web browser. The browser's address bar shows the URL: `dataplatfom.cloud.ibm.com/ml-runtime/deployments/b04b6555-04fb-4450-8bcc-b3c774efaae2/chat?space_id=d200b3d4-8ce7-438a-992b-5fd704a8e353&con...`. The page title is "watsonx Agent" and it shows a "Deployed" status with an "Online" indicator.

The interface has three tabs: "API reference", "Test", and "Preview". The "Preview" tab is active, showing a chat conversation. The user's message is "she doesn't like. chickpea". The agent's response is: "Understood. Given that she doesn't like chickpeas, let's modify the breakfast to use lentils instead, which are also high in protein and fiber and suitable for PCOS management."

The agent's response includes a section titled "Breakfast: Lentil Soup (Masoor Dal)" with the following details:

- Ingredients: Lentils (1 cup cooked), onion (1 medium), tomatoes (2), ginger (1 inch), garlic (3 cloves), spices (turmeric, cumin, coriander, garam masala), olive oil (1 tbsp), salt, and pepper to taste.
- Calories: ~380
- Protein: ~18g
- Glycemic Load: Low
- Lentils are an excellent source of protein and fiber, beneficial for PCOS and weight management.

The chat input field at the bottom says "Type something...".

On the right side, there is a sidebar titled "About this deployment" with the following information:

- Name:** watsonx Agent
- Description:** Change this description to reflect your particular agent
- Deployment Details:**
  - Deployment ID: b04b6555-04fb-44...
  - Serving name: No serving name.
  - Software specification: runtime-24.1-py3.11
  - Hardware specification: Extra extra small: 1 CPU and 2 GB RAM
  - Copies: 1
- Tags:** wx-agent
- Associated asset:** watsonx Agent (ac51acdd-7212-4cad-b93b-8d1d7cd25b7e)
- Last modified:** 47 seconds ago