

Energy

Protein

Nitrogen Footprint

125.9kcal

2.9g

4.5gN

●Instructions

1.Slice the bananas to your preferred thickness.

2.Mix the yogurt and sugar thoroughly.

3.Add the mixed fruit and banana slices.

●Fruit Yogurt

Ingredients (Serves 4)

200 g yogurt

2 bananas (300 g)

1 can mixed fruit cocktail

2 Tbsp sugar (18 g)

School Lunch Favorite!

Ingredients (Serves 4)

200 g yogurt

2 bananas (300 g)

1 can mixed fruit cocktail

2 Tbsp sugar (18 g)

Energy

Protein

Nitrogen Footprint

150.3kcal

4.1g

2.9 g N

●Instructions

1.Cut the ham into 1.5 cm cubes. Cut the cherry tomatoes in half (or into quarters if large). Thinly slice the cucumber.

2.Mix the *okara* and mayonnaise well. Add the ham, cucumber, and tomatoes and stir together.

●No-Cook *Okara* Salad

Ingredients (Serves 4)

160 g *okara*

6 cm cucumber (about 30 g)

2 slices ham (26 g)

8 cherry tomatoes (54 g)

4 Tbsp mayonnaise (56 g)

Using *okara* (soy pulp) is also a great way to reduce food waste.

You can also replace the mayonnaise with your favorite salad dressing.

Energy

Protein

Nitrogen Footprint

533.9kcal

12.1g

39.8gN

●Instructions

1.Prep the fried tofu: Place the fried tofu in boiling water until softened, then remove and drain. Alternatively, place it in a colander and pour boiling water over it to remove excess oil.

2.Cut the ingredients: Cut the onion, potato, carrot, and fried tofu into bite-sized pieces. Slice the *kujo* green onions diagonally.

3.Saute and simmer: Heat vegetable oil in a pot and saute all ingredients (except the green onions) for about 5 minutes. Add water and bring to a boil. Reduce the heat and simmer for about 20 minutes until the vegetables are tender.

4.Finish the curry: Turn off the heat and add the curry roux. Stir until the curry thickens. Add the *kujo* green onions at the end and cook briefly until they are softened.

●Healthy Fried Tofu Curry

Ingredients (Serves 6)

2 sheets *abura-age* (fried tofu) (120 g)

1 1/2 onions (300 g)

1 potato (150 g)

1/2 carrot (100 g)

2 tsp vegetable oil (8 g)

750 mL water

About 100 g curry roux

2 *kujo* green onions (48 g)

Removing excess oil from fried tofu (*abura-age*) allows flavors to soak in more easily. This simple step can also significantly reduce the calorie content of the dish.

Energy

Protein

Nitrogen Footprint

738.7kcal

16.9g

39.8gN

●Instructions

1.Prep the beef: Spread out the beef slices as much as possible. Season with a pinch of salt and pepper.

2.Saute and simmer: Heat vegetable oil in a pot and saute the vegetables for about 5 minutes. Add water and bring to a boil. Reduce the heat and simmer for about 20 minutes until the vegetables are tender. Add the beef meatballs to the pot.

3.Finish the curry: Turn off the heat and add the curry roux. Stir until completely dissolved. Return to low heat and simmer, stirring occasionally to prevent sticking, until the curry thickens.

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●Kitchen Tip: How Much of a Vegetable Can We Eat?

When preparing vegetables, we often peel them or remove seeds. However, many vegetables, including carrots, daikon radish, and Japanese yam, can be eaten with their skins. Even bell pepper seeds are perfectly edible! Reducing unnecessary trimming is a simple way to reduce food waste.

Energy

Protein

Nitrogen Footprint

738.7kcal

16.9g

39.8gN

●Instructions

1.Prep the vegetables: Cut the onion, potato, and carrot into bite-sized pieces.

2.Saute and simmer: Heat vegetable oil in a pot and saute the vegetables for about 5 minutes. Add water and bring to a boil. Reduce the heat and simmer for about 20 minutes until the vegetables are tender. Add the beef meatballs to the pot.

3.Finish the curry: Turn off the heat and add the curry roux. Stir until completely dissolved. Return to low heat and simmer, stirring occasionally to prevent sticking, until the curry thickens.

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●Curry with Thinly Sliced Beef Meatball

Ingredients (Serves 6)

250 g thinly sliced beef

2 tsp vegetable oil (8 g)

750 mL water

About 100 g curry roux

2 tsp oil for browning the beef (8 g)

1 1/2 onions (300 g)

1 tsp flour (3 g)

1 potato (150 g)

1/2 carrot (100 g)

Thinly sliced beef is cost-effective and cooks quickly, which also means lower fuel consumption. Using ready-made curry roux keeps this recipe simple and stress-free. Start with the basics, explore with spices.

Understanding Food and Nitrogen

Energy

Protein

Nitrogen

Energy is the ability to do work. In the context of nutrition, it refers to the energy that food provides to support life and daily activities. The main nutrients that provide energy are protein, fat, and carbohydrates. However, eating too much can lead to weight gain.

Proteins are built from amino acids, and every amino acid contains nitrogen. Protein is an essential nutrient that builds our muscles, skin, and organs. It is also the foundation of enzymes that produce energy and sustain vital body functions.

About 80% of the air around us is nitrogen gas (N₂). Although N₂ is abundant, it is chemically stable and cannot be used directly as food by plants or humans. When it is converted into other nitrogen compounds, such as ammonia or nitrate, it can be used as fertilizer for plant growth. Today, nitrogen fertilizers play an important role in producing crops and livestock.

●N₂

●H₂

●NH₃

Nitrogen Footprint

How Nitrogen Moves Through the Food System

Nitrogen Footprints of Foods

A footprint is a measure of our impact on the environment. Smaller footprints are generally better. The nitrogen footprint represents the total amount of nitrogen released to the environment throughout the production, transportation, and consumption of food.

Nitrogen added through fertilizers and other inputs

Nitrogen contained in food

Nitrogen released during production

Nitrogen released after food is consumed

Production

Consumption

Environment (soil, water, and air)

High

Low

Cow

Chicken

Fish

Cheese

Egg

Milk

* The values shown for energy, protein, and nitrogen footprint in each recipe are given per serving.

Research Institute for Humanity and Nature

Sustai-N-able Project

Towards Sustainable Nitrogen Use

Connecting Human Society and Nature

Project Website

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Curry Recipe Book

Nitrogen & The Environment : Earth-Friendly Recipes

Hand

Girl

Boy