NutriPlate - Recipe Service

NutriPlate Recipe Service adalah microservice yang bertugas mengelola dan menyediakan **data katalog resep** beserta **komposisi bahannya (ingredients)** kepada client. Service ini dibuat menggunakan framework CodeIgniter 4, lalu dikemas dalam Docker Container untuk isolasi sistem, dan dijalankan pada perangkat STB. Layanan ini menyediakan akses data melalui RESTful API yang diamankan dengan mekanisme otentikasi X-API-KEY.

Akses Publik (Deployment)

Akses publik menggunakan Cloudflare Tunnel (Zero Trust) dan dapat diakses secara publik melalui:

https://recipes.otwdochub.my.id

Teknologi Stack

- PHP 8.2
- CodeIgniter 4
- SQLite3
- Docker & Docker Compose
- STB B860H (Armbian Linux)
- Cloudflare Zero Trust (Tunnel)

Autentikasi

Layanan ini menggunakan mekanisme **Custom API Key Authentication**.

Setiap request ke endpoint tertentu **wajib input header berikut**:

Header Name	Value
X-API-KEY	belin123

Jika API Key tidak valid atau tidak disertakan, server akan merespons dengan status **40 1 Unauthorized**.

Dokumentasi API (Endpoints)

Berikut adalah daftar endpoint yang tersedia.

A. Mendapatkan Semua Resep (GET /recipes)

Mengambil seluruh daftar resep yang tersedia di database.

- **URL:** /recipes
- **Method:** GET
- **Auth:** Wajib (X-API-KEY: belin123)

Contoh Response Sukses (200 OK)

```json
[
  {
    "recipe_name": "Mulligatawny Soup",
    "ingredients": "chicken, rice, celery, apple, butter, flour",
    "matched_ingredients": "chicken, rice, celery, apple, butter, flour"
  },
  {
    "recipe_name": "Waldorf Salad",
    "ingredients": "apples, celery, walnuts, raisins, mayonnaise, lemon juice",
    "matched_ingredients":
            "apples, celery, walnuts, raisins, mayonnaise, lemon juice"
  }
]
```

https://recipes.otwdochub.my.id/recipes/

Save

GET   https://recipes.otwdochub.my.id/recipes/   Send

Docs   Params   Authorization   Headers (7)   Body   Scripts   Settings   Cookies

Headers   6 hidden   Bulk Edit   Presets

	Key	Value	Description
☑	X-API-KEY	belin123	
	Key	Value	Description

Body   Cookies   Headers (16)   Test Results   200 OK   898 ms   1.79 KB

{} JSON   Preview   Visualize

```
 1  [
 2      {
 3          "recipe_name": "Mulligatawny Soup",
 4          "ingredients": "Chicken, rice, celery, apple, butter, flour",
 5          "matched_ingredients": "chicken, rice, celery, apple, butter, flour"
 6      },
 7      {
 8          "recipe_name": "Waldorf Salad",
 9          "ingredients": "Apples, celery, walnuts, raisins, mayonnaise, lemon juice",
10          "matched_ingredients": "apples, celery, walnuts, raisins, mayonnaise, lemon juice"
11      },
12      {
13          "recipe_name": "Pork Tenderloin",
14          "ingredients": "Pork, onions, apple, chicken stock, butter",
15          "matched_ingredients": "pork, onions, apple, butter"
16      },
17      {
18          "recipe_name": "Classic Rice Pudding",
19          "ingredients": "Rice, milk, sugar, butter, cherries, egg",
```

Contoh Response Gagal (401 Unauthorized)

```
{
  "status": 401,
  "error": 401,
  "messages": {
    "error": "Maaf, API Key tidak valid untuk melihat resep."
  }
}
```

```
HTTP  https://recipes.otwdochub.my.id/recipes/                                    Save ▾

GET      ▾    https://recipes.otwdochub.my.id/recipes/                            Send  ▾

☰ Docs   Params   Authorization   Headers (7)   Body   Scripts   Settings        Cookies

Headers   👁 6 hidden

        Key                          Value              Description        ··· Bulk Edit  Presets ▾
   ☐    X-API-KEY                     belin123
        Key                          Value              Description

Body  Cookies  Headers (15)  Test Results  ⟲                    401 Unauthorized  · 607 ms · 968 B · ⬡ · ···

{} JSON ▾   ▷ Preview   ⚙ Pass the correct auth credentials  ▾              ⬚ ≡ Q | ⧉ ⧉

1  {
2      "status": 401,
3      "error": 401,
4      "messages": {
5          "error": "Maaf, API Key tidak valid untuk melihat resep."
6      }
7  }
```

B. Mendapatkan Detail Resep (GET /recipes/ {recipe_name})

Mengambil detail satu resep spesifik berdasarkan **nama resep**.
Nama resep pada URL **harus di-encode** jika mengandung spasi
(contoh: spasi menjadi %20).

- **URL:** /recipes/{recipe_name}
  Contoh: /recipes/Mulligatawny%20Soup
- **Method:** GET

Contoh Response Sukses (200 OK)

```
{
  "recipe_name": "Mulligatawny Soup",
  "ingredients": "chicken, rice, celery, apple, butter, flour",
  "matched_ingredients": "chicken, rice, celery, apple, butter, flour",
  "ingredients_list": [
    "chicken",
    "rice",
    "celery",
    "apple",
    "butter",
    "flour"
```

```
    ]
  }
```

https://recipes.otwdochub.my.id/recipes/Mulligatawny%20Soup   [Save ▾]

[GET ▾] https://recipes.otwdochub.my.id/recipes/Mulligatawny%20Soup   [Send ▾]

≡ Docs   Params   Authorization   Headers (7)   Body   Scripts   Settings   Cookies

Headers   👁 6 hidden

☐	Key	Value	Description	⚬⚬⚬ Bulk Edit Presets ▾
☑	X-API-KEY	belin123		
	Key	Value	Description	

Body   Cookies   Headers (16)   Test Results   ⟲   200 OK • 575 ms • 1 KB 🔒 • ⚬⚬⚬

{} JSON ▾   ▷ Preview   🖼 Visualize ▾
```
```json
 1   {
 2       "recipe_name": "Mulligatawny Soup",
 3       "ingredients": "Chicken, rice, celery, apple, butter, flour",
 4       "matched_ingredients": "chicken, rice, celery, apple, butter, flour",
 5       "ingredients_list": [
 6           "Chicken",
 7           "rice",
 8           "celery",
 9           "apple",
10           "butter",
11           "flour"
12       ]
13   }
```

Contoh Response Jika Tidak Ditemukan (404 Not Found)

```json
{
  "status": 404,
  "error": 404,
  "messages": {
    "error": "Resep dengan nama \"Nasi Goreng\" tidak ditemukan."
  }
}
```

GET | https://recipes.otwdochub.my.id/recipes/Nasi%20Goreng | Send

Docs | Params | Authorization | Headers (7) | Body | Scripts | Settings

Cookies

Headers · 6 hidden

	Key	Value	Description	Bulk Edit Presets
☑	X-API-KEY	belin123		
	Key	Value	Description	

Body | Cookies | Headers (16) | Test Results

404 Not Found · 537 ms · 975 B

{} JSON ∨ | ▷ Preview | Debug with AI ∨

```
1  {
2      "status": 404,
3      "error": 404,
4      "messages": {
5          "error": "Resep dengan nama \"Nasi Goreng\" tidak ditemukan."
6      }
7  }
```

Cara Menjalankan (Local)

1. Clone Repository

```
git clone https://github.com/vincentiabelindaa/uas-tst-recipe.git
cd uas-tst-recipe
```

2. Jalankan Service

```
docker-compose up -d --build
```

3. Akses Service

Service dapat diakses melalui browser di: http://localhost:8080/recipes

Menggunakan cURL

```
curl -X GET https://recipes.otwdochub.my.id/recipes \
  -H "X-API-KEY: belin123"
```