

1. Profile Tab

- â€¢ Collects user demographics, goals, diet type, allergies once.
- â€¢ Data is stored in Streamlit session_state as 'diet_profile'.

2. Diet Planner Tab

- â€¢ Reads saved profile and calculates BMR, TDEE, macro targets.
- â€¢ Sends structured prompt to OpenAI (gpt-4o-mini) to build a 7-day plan.
- â€¢ Validates AI response: 7 days, required meals, calorie tolerance, allergen scan.
- â€¢ Saves plan summary into session_state['diet_plan_result'] for other tabs.

3. Nutrition Analyzer Tab

- â€¢ Loads IFCT 2017 food database on startup.
- â€¢ Users add dishes via quick picks or bulk paste.
- â€¢ Calls OpenAI to parse dishes, match IFCT entries, and compute macros.
- â€¢ Displays totals, meal breakdown table, and AI parsing notes.

4. Hydration Coach Tab

- â€¢ Computes daily target = base (weight) + activity bonus, climate multiplier.
- â€¢ Lets user log actual water intake per-day, stored in session_state['hydration_log'].

5. Wellness Calendar Tab

- â€¢ Combines diet_plan_result schedule + hydration_log into calendar view.
- â€¢ Green cells indicate plan adherence; icons show plan/hydration events.
- â€¢ Date selector allows toggling plan achievement without reloading.

6. Dashboard

- â€¢ Summarises plan status, meals queued, today's calories, hydration trend.
- â€¢ Charts reference stored plan data and hydration logs in real-time.

Data Sources & Integrations

- â€¢ IFCT 2017 composition CSV for all macro lookups.
- â€¢ OpenAI GPT-4o-mini for meal plan and analyzer generation.
- â€¢ Streamlit session_state for cross-tab data persistence.