

Functional Dependencies

1. Food Intake Tracking

- **Dependent On:**

- None directly; serves as the base for several other functions.

2. Health Monitoring

- **Dependent On:**

- **Food Intake Tracking:** To combine dietary data with health metrics.
- **Integration with HIS:** To share collected health data with external systems.

3. Personalized Diet Recommendations

- **Dependent On:**

- **Food Intake Tracking:** For understanding dietary habits and nutrient intake.
- **Health Monitoring:** To tailor recommendations based on health metrics.
- **Behavioral Analysis:** For suggesting recommendations that align with user behavior and habits.
- **Emotional Health Insights:** To consider emotional patterns when making recommendations.

4. Meal Planning Assistance

- **Dependent On:**

- **Personalized Diet Recommendations:** To align plans with individual dietary goals.
- **Food Intake Tracking:** To adjust plans based on tracked meals.
- **Behavioral Analysis:** To ensure plans are feasible and sustainable for the user.

5. Real-Time Feedback and Alerts

- **Dependent On:**

- **Food Intake Tracking:** To identify deviations from dietary goals.
- **Health Monitoring:** To issue alerts based on critical health metrics.
- **Behavioral Analysis:** To determine when feedback is necessary.

6. Progress Visualization

- **Dependent On:**

- **Food Intake Tracking:** For visualizing dietary trends.
- **Health Monitoring:** To show changes in health metrics.
- **Behavioral Analysis:** To highlight habit improvements over time.

7. Emotional Health Insights

- **Dependent On:**

- **Food Intake Tracking:** To relate dietary habits to emotional health.
- **Behavioral Analysis:** To detect patterns between food intake and emotions.
- **Personalized Diet Recommendations:** To offer strategies reducing stress or guilt.

8. Integration with HIS

- **Dependent On:**

- **Food Intake Tracking:** For sharing dietary data.
- **Health Monitoring:** For integrating health metrics into HIS platforms.

9. Social Engagement

- **Dependent On:**

- **Food Intake Tracking:** To share meal data, tips, and recipes.
- **Progress Visualization:** To share success stories or improvements.

10. Behavioral Analysis

- **Dependent On:**

- **Food Intake Tracking:** For identifying eating patterns.
- **Health Monitoring:** To correlate health and dietary behaviors.
- **Emotional Health Insights:** To connect emotions with eating habits.

User Journeys for Bite Bright

User Journey 1: Track Food Intake

1. Open Bite Bright App → Log in → Navigate to "Track Food Intake" → Input meal details (food type, portions) → Submit → View meal categorization (healthy/unhealthy) → Log confirmation.
-

User Journey 2: Monitor Health Data

1. Sync Wearable Device → Open Bite Bright App → Log in → Access Health Dashboard → View health metrics (e.g., heart rate, steps) → Analyze trends.
-

User Journey 3: Add Health Condition

1. Open Bite Bright App → Log in → Navigate to "Health Conditions" → Select "Add Condition" → Input condition details → Submit → View confirmation.
-

User Journey 4: Personalized Diet Recommendations

1. Open Bite Bright App → Log in → Ensure sufficient health and food data is logged → Request personalized diet plan → Review recommended diet → Save or modify the plan.
-

User Journey 5: Real-Time Feedback

1. Open Bite Bright App → Log in → Enable real-time monitoring → System detects dietary deviations → Receive notifications → View corrective suggestions.
-

User Journey 6: Emotional Health Monitoring

1. Open Bite Bright App → Log in → Navigate to "Emotional Health" → Input mood/stress data → Submit → View insights and suggestions.
-

User Journey 7: Meal Planning Assistance

1. Open Bite Bright App → Log in → Navigate to "Meal Planning" → Input dietary goals/preferences → Generate weekly meal plan → Save or customize the plan.
-

User Journey 8: Progress Visualization

1. Open Bite Bright App → Log in → Access Dashboard → View diet and health trends → Analyze progress over time.
-

User Journey 9: Community Engagement

1. Open Bite Bright App → Log in → Navigate to "Community" → Browse tips and recipes → Share your own experiences → Interact with other users.
-

User Journey 10: Categorize Meals

1. Open Bite Bright App → Log in → Navigate to "Meal Categorization" → Input meal details → System categorizes meal (healthy/unhealthy) → View categorized data.
-

User Journey 11: Integration with Health Information Systems (HIS)

1. Open Bite Bright App → Log in → Connect to HIS → Sync health and food intake data → View consolidated information in the app → Update health records in HIS.
-

User Journey 12: Behavioral Analysis and Suggestions

1. Open Bite Bright App → Log in → Navigate to "Behavioral Analysis" → Review eating/emotional patterns → Receive actionable suggestions → Implement improvements.
-

User Journey 13: Weekly Progress Review

1. Open Bite Bright App → Log in → Access "Weekly Progress" → Review summaries of diet and health trends → Reflect on progress and adjust goals.
-

User Journey 14: Set Up Notifications

1. Open Bite Bright App → Log in → Navigate to "Settings" → Enable notifications for dietary and health goals → System monitors activity → Receive updates and alerts.
-

User Journey 15: Set Goals and Track

1. Open Bite Bright App → Log in → Navigate to "Set Goals" → Define dietary/health objectives → Save goals → Monitor progress against these goals.
-