

# Dietary and Nutrition Management System

Designed & Presented by: Yanhui Ma



# Background Information

- ❖ Malnutrition remains a prominent and substantial concern in Australian aged care facilities
- ❖ Call for a collaborative and methodical approach
- ❖ Directing the building of a user-friendly and effective food and nutrition management system



# Objectives Of The Prototype

- ❖ Directs the current nutrition management approach
- ❖ Facilities a dietary and nutrition management system
- ❖ Integrates the key features identified from the research into one system design
- ❖ Ensures the sample, convenient and easy to use





Resident  
Profile  
Management



Food Tracking  
and Analysis



Meal Planning  
and Nutrition  
Management



Feedback and Reviews

Implement regular mealtime audits and feedback mechanisms to gather residents' input on food quality, presentation, and overall dining experience.



Staff Education and Workshop

Recipes and advice are provided for common health problems and physical illnesses in old age.

# Residential Profile Management



Nutritionist

- Dashboard
- Resident Profile
- Analysis
- Meal Plan
- Workshop
- Feedback
- Report

 Dr. Kiran Patel  
Nurse

Home Resident Profile Management

**Basic Information**

Name	John
Age	73
Gender	Male
Height	172cm
Weight	86Kg
Religion	Buddhism

**Allergen History**

Soybean

**Dietary Favor**

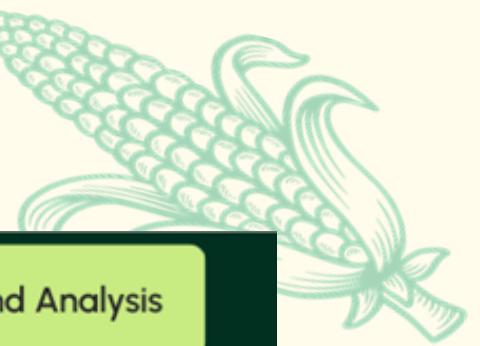
Heavy Salting  
Beef  
Pork  
Lam  
Milk

**BMI**  
You are **obese** body weight!



Items	Standards	Actual Value	Status
Oral Health	DMFT = 0-28	30	Warning
Blood Pressure	120/80 mmHg	128/85 mmHg	High
Blood Sugar Monitoring	Fasting < 5.6 mmol/L Postprandial < 7.8 mmol/L	6.5 mmol/L 8.5 mmol/L	Warning
Cholesterol levels	< 5.2 mmol/L	6.1 mmol/L	Warning
Calf Circumference	31 - 37 cm (Male) 30 - 36 cm (Female)	32 cm	Normal
Mental Health	Stabilization	Cheerful	Normal

# Food Tracking and Analysis



**Nutritionist**

Home Food Tracking and Analysis

Dashboard Resident Profile Analysis Meal Plan Workshop Feedback Report

Dr. Kiran Patel Nurse

Intake: 2,265 (+11.02%) Metabolism: 1,801 (-0.03%) Fat: 956 (+15.03%) Water: 1,965 (+11.02%) Carbohydrate: 756 (+15.03%)

Tracing List: Wendy, Stark, Ben

**Recommended:** John are already overnourished! Fat intake is too high. Boost your mineral intake with 300g vegetables.

**Dietary Intake:** 84% used (Staple Food, Milk, Vegetable, Meat, Fruits)

**Vegetables with High Mineral:** Nov 5 - Dec 5 (Green pepper, Cucumber, Celery)

**Protein Content:** August xx - xx (Mon, Tue, Wed, Thu, Fri)

**Trace Element Intake:** Mon - Fri (Zinc, iron, Calcium, Vitamin C, Vitamin A)

# Meal Planning and Nutrition Management



Nutritionist

Home

Meal Planning and Nutrition Management

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Dr. Kiran Patel

Nurse



## Recommended food recipes



Vegan

Pescatarian

Meat

Keto

Vegetarian

Juice

Soup



15m

260 g



### Fall Spinach Salad

Start Cooking



Fall spinach salad



Stir-fried noodles



Stir-fried noodles

# Staff Education and Workshops



**Nutritionist**

Home Staff Education and Workshop

Dashboard Resident Profile Analysis Meal Plan Workshop Feedback Report

Dr. Kiran Patel Nurse

**Malnutrition**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**Diabetes**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**High Blood Pressure**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**High Cholesterol**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**Rarefaction of Bone**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**Angiocardiopathy**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**Cognitive Function**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**Digestive System**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

**Oral Health**

**French Green Salad**  
Discover the joy of a truly nourishing meal.

125 kcal

# Feedback and Reviews



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Dr. Kiran Patel

Nurse

**John**

Better than I thought. I thought I could never eat potatoes again with diabetes.

**Anne**

I suspect my analysis is not accurate, I've been following it since the last feedback and recipe, but my calf circumference hasn't changed at all.

**Jerry**

The recipes here have refreshed my knowledge, I thought I already knew everything about cooking, but it is always innovating.

**Ben**

I don't know why, they always give me vegetables, I want meat. My mood is not good, how can the body be healthy.

**Tom**

I want to eat what I want to eat, I also want to be healthy, what food can fulfill my wish and replace fried chicken.

**Shark**

I feel better and better, and to my surprise there are fewer wrinkles.



Thanks!!

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