失智情境VR共感體驗
Dementia Scenario VR Empathy Experience

【Introduction】

Put on the VR headset and step into the world through the eyes of a person living with dementia. From the moment you walk out the door in the early morning, the world begins to flow at a different pace. Every seemingly ordinary scene becomes an encounter woven with uncertainty and courage; every interaction is a silent reminder of the importance of understanding and patience.

【Why Experience This VR Simulation?】

Through a first-person perspective, you will experience the communication challenges that people with dementia may face in daily life, and learn five simple and practical “Dementia-Friendly Communication Skills (STE^{2}P).” Understanding is the first step in building a friendly and inclusive community.

【How to Experience】

Put on the VR headset and select either the “Positive” or “Negative” version.

Enter the scenario and experience the journey—from leaving home to taking transportation and shopping.

Reflect on how to apply STE^{2}P when interacting with people with dementia to make communication smoother.

《A Day in the Life of a Person with Dementia: Integrating Friendly Communication into Daily Living》

Positive Communication | Mandarin Version | First-Person VR Experience Film

This VR film, presented from a first-person perspective, immerses you in a day experienced by a person living with dementia. It reveals the communication gaps and challenges that may arise during their daily interactions with the world around them.

From waking up in the morning, stepping outside, taking public transportation, entering shops, asking for directions, to seeking assistance, each scene depicts situations commonly faced by many individuals with dementia. Because people with dementia often appear no different from anyone else, it can be difficult for others in the community to recognize their needs and respond appropriately.

We hope that after viewing this film, audiences will apply these dementia-friendly communication skills in their daily lives, helping to foster a more inclusive and supportive dementia-friendly society.

《A Day in the Life of a Person with Dementia: Integrating Friendly Communication into Daily Living》

Negative Communication Scenario | Taiwanese (Hokkien) Version | First-Person VR Experience Film

This VR film, presented from a first-person perspective, places viewers in the role of a person living with dementia. Beginning from the moment you step outside in the morning, you will encounter several everyday situations that can become unexpectedly challenging—taking a bus, withdrawing money, and shopping.

Unlike the positive communication version, this film focuses on common examples of negative or unhelpful communication.

Though the scenes are dramatized, they reflect conversations and interactions that frequently occur in real life.

Through an immersive sensory experience, this film allows the public to better understand the world of people with dementia and reminds us that any one of us could be that person who “doesn’t know how to help” in the moment.

大腦認知健康評估
Cognitive Health Assessment

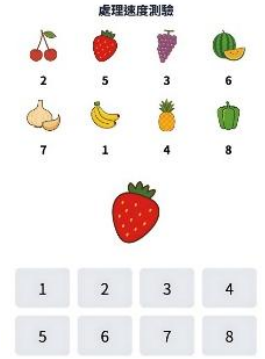
As we age, our memory and processing speed naturally slow down. Through our interactive games based on daily life scenarios, we help you spot the early signs of cognitive decline - making it easy to monitor and maintain your brain health.

定向感

◎ Orientation:

Know Your Time & Place: Without any hints, answer questions about where you are and what time it is. This checks your awareness of your current surroundings.

處理速度



◎ Processing Speed:

Match the Fruits: Quickly identify and match images of fruits and vegetables from the list. See how fast your brain can react and process visual information.

算術能力

◎ Arithmetic:

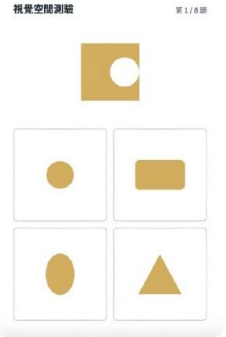
Mental Math Challenge: Solve simple math problems to test your focus, working memory, and calculation skills. Don't worry, it's about agility, not advanced math.

記憶

◎ Memory:

Test Your Recall: Memorize 5 different items and try to recall them immediately, and then again after 5 minutes. This tests how well you can store and retrieve information.

視覺空間



◎ Visuospatial Skills:

Find the Missing Shape: Look at the pattern and spot the missing piece. This tests your eye for detail regarding shape, size, and orientation.

AI智慧糖腎門診
AI-Enabled Diabetes and Kidney Care Clinic

① Smart Consultation Assistant

Key Labs - Core Laboratory Data

eGFR 16.0 ▲ At risk	UACR 4050 mg/g	K 3.5 ▲ At risk	HCO3 22.8 Normal
Hb 9.9 Normal	Ca 8.8 mg/dL	P 4.3 mg/dL	PTH 188 pg/mL
LDL-C 84 mg/dL	HbA1c 7.3 %		

Medications - Recommendations

Exforge/valsartan/Amlodipine	Continue
Dapaglifozin 10 mg	Continue
Finerenone 20 mg	Contraindicated
Rosuvastatin 10 mg	Add
Metformin	Contraindicated

Main Check - Follow-up Tracking

UACR Pending	eGFR Pending
Renal US Pending	Fundoscopy Complete

② AI Medication Analysis

✓ Current Status & Recommendations

- Current Status: Continue
- Medication Recommendation: Exforge 5/160 mg once daily (= Amlodipine 10 mg/d
- Alert: BP 193/89 not at target; with maximum tolerated RAS inhibition & CCB, need to add strong diuretic
- Main Concern:
  KDOQI Recommendation: For patient follow-up (UACR > 3000 mg/g), monitor for CKD renal pelvic cancer AR

Dosage Adjustment Reference

Renal Function Adjustment (eGFR 16)
ARB does not require eGFR-based adjustment; but monitor SCr/K 1-2 weeks after initiation/adjustment

Hepatic Function Adjustment
ALT normal, no adjustment needed

Age (67 years)
Monitor for orthostatic hypotension and fall risk

Efficacy Target Adjustment
BP 193/89 vs target less than 130/80 → Must intensify

⚠ Drug Interaction Analysis

DDI Valsartan + Lithium (if used in future)
Reduces lithium renal clearance/increases drug effect

CI/Rx Valsartan + Aliskiren (DM/renal failure patients)
Risk of hypotension/hyperK/renal damage↑ Contraindicated

Monitoring Parameters

Renal Panel	Blood Pressure	Monitoring Adjustment
SCr · K · Na (initiation/1-2 weeks after adjustment, every 4-12 weeks when stable)	Home BP diary · Edema/ weight/orthostatic hypotension	1-2 weeks, 4 weeks after medication, 1-3 months when stable

③ AI Nutrition Education Sheet

Daily Nutrition Goals

Calories 25-30 kcal/kg/d	Protein 0.6-0.8 g/kg/d	Sodium 6 g/d
Phosphorus 2-3 g/d	Potassium 800-1000 mg/d	Water 1500-2000 mL/d

Six Food Groups Recommendations

Grains 8 servings 1 bowl rice, 1 slice toast	Protein Foods 3 servings Lean meat, tofu, eggs
Vegetables 2 servings Greens, low-K vegetables	Fruits 2 servings Apples, guava

✓ Dietary Key Points

- Choose high-quality protein: eggs, fish, lean meat
- Limit high-potassium foods: reduce bananas, tomatoes, oranges
- Low-phosphorus diet: reduce dairy, organ meats, nuts
- Control blood sugar: regular meals, monitor blood glucose
- Reduce processed foods: avoid high-sodium seasonings
- Moderate water intake: adjust daily fluid intake per medical advice

⚠ Foods to Avoid

⚠ High-Potassium Fruits
Bananas, kiwi, cantaloupe

⚠ High-Phosphorus Foods
Dairy products, processed foods

⚠ Soups & Broths
Lamb stew, chicken soup

運動機能監控測試
Movement Function Assessment and Monitoring

This system provides comprehensive assessments of human motor abilities and supports various exercise training activities. At the end of each session, an individualized data analysis report is generated instantly.

Lower Limb Assessment: The system evaluates lower-limb dynamic strength, isometric strength, and balance control.

The primary tests include: Double-Leg Standing Balance, Single-Leg Standing Balance, Squat Dynamic Balance

Each assessment takes approximately 5 minutes per person, and a detailed data analysis report is provided upon completion.

失智症溝通五原則S-T-E-E-P
Five Principles of Dementia-Friendly Communication: S-T-E-E-P

People living with dementia often appear no different from anyone else, yet during conversations they may face communication barriers due to challenges with memory or comprehension. By applying the simple “Dementia-Friendly Communication Skills: STE2P,” we can reduce misunderstandings, enhance mutual understanding, and create warmer, smoother interactions.

The five skills include:

- **Smile –** Greet the person with a warm smile and briefly introduce yourself or offer a simple greeting. This helps build rapport and provides a sense of safety and comfort.
- **Thanks –** A sincere “thank you” may seem small, but it creates positive reinforcement and strengthens feelings of respect and participation.
- **Eye Contact –** Maintain a gentle, level gaze. Stable eye contact is key to building trust and staying engaged in the conversation.
- **Embracing the Moment –** When a person with dementia expresses something that isn’t factual, avoid correcting or arguing. Instead, acknowledge their feelings and respond to their needs in that moment.
- **Patience –** Slow down your speech, respond step-by-step, and listen attentively. A patient pace helps establish a calm and effective rhythm for communication.

Friendly communication doesn’t have to be difficult. It begins with a single smile. The next time you encounter a similar situation, try using STE2P—so both sides can feel more understood, supported, and connected. Together, we can build a more dementia-friendly community.

運用智能互聯
Leveraging Smart Connectivity

Emergency Call System: Immediate Response for Precise Patient Needs

◆ **Real-Time Alert Design to Ensure Patient Safety**
- Red emergency buttons and pull cords installed at the bedside and in bathrooms
- When activated, the corridor light turns solid red and a red alert appears at the nursing station
- Alerts remain active until staff address the situation, ensuring continuous protection for patient safety

◆ **Categorized Notifications to Enhance Response Efficiency**
- Call requests are classified into: general call, IV change, and cleaning service
- Nurses can prepare the necessary items in advance, reducing unnecessary trips
- Streamlined workflow improves care efficiency and boosts patient satisfaction

Mobile Nursing Smart Phones: Enabling Real-Time, Efficient Clinical Care

◆ **Integrated with the Call System to Enhance Efficiency**
- Mobile phones are fully linked with the patient call system
- Nurses can answer patient or family calls instantly, whether inside the ward or while moving between rooms
- Reduces unnecessary trips back to the nursing station, lowering workload and improving workflow

◆ **Real-Time Critical Value Alerts for Rapid Response**
- When a laboratory critical value is detected, an alert is immediately sent to the primary nurse's phone
- Allows rapid activation of the critical value response protocol
- Replaces traditional phone-call notifications, providing faster, more effective communication and enhancing patient safety

Full-Color Electronic Bedside Card: A New Smart Tool for Digital Ward Care

◆ **Reducing Nursing Workload**
- Automatically integrates with the HIS; patient information is updated in real time
- Minimizes manual writing and revisions
- Displays key care information to streamline workflow
- Enhances care quality and patient safety

◆ **Patient Information at a Glance**
- Clear display of basic information, medical history, and allergy history
- Prompts for blood draws, examinations, and surgical schedules
- Care reminders including fluid restriction, diet notes, fall prevention, and tube/line management

◆ **Powered by Kaleido Color E-Paper Technology**
- Bi-stable display with ultra-low power consumption; eco-friendly and energy-saving
- Soft, paper-like color display that reduces glare and avoids disturbing patients at night

Smart Pressure-Relief Air Mattress: Preventing Pressure Injuries with Intelligent Pressure Monitoring

◆ **Automatic Pressure Detection and Intelligent Adjustment**
- Pressure sensing activates automatically when the patient lies down
- 228 sensing points analyze body pressure and adjust air-cell inflation/deflation accordingly
- Alternating pressure-relief cycles effectively prevent pressure injuries and improve sleep quality

◆ **Integrated with Remote Care System App**
- View turning records, pressure maps, and real-time lying posture
- Abnormal status alerts allow nursing stations to monitor patient conditions instantly
- Reduces the physical burden of frequent repositioning and lowers the risk of caregiver occupational injuries

Smart In-Room TV System: Creating a Personalized Interactive Platform for Patients

◆ **Patient-Centered Design for a More User-Friendly Experience**
- Equipped with a large display and simple, intuitive interface
- Provides a dedicated patient platform for easier reading and navigation

◆ **Fully Digitalized Health Education**
- Includes hospital and ward information (with evacuation routes)
- Digital presentations of disease education and care instructions across departments
- Reduces paper use and supports environmental sustainability

◆ **Integrated with Room Environment Controls and Call System**
- TV system connects with lighting, curtains, and other environmental controls
- Patients can operate all functions easily via remote control
- Call and alert features are integrated into the Melten Medical IoT Platform

Comprehensive Vital Signs Monitoring System: A Powerful Tool for Real-Time Nursing Care

A comprehensive vital signs monitoring system is installed within the smart ward to measure:
body temperature, blood pressure, oxygen saturation, blood glucose, and electrocardiogram (ECG).
All data can be uploaded instantly to the HIS system.

◆ **Key Features:**
1. Measurement data is automatically synchronized to the system, reducing nursing workload.
2. Real-time monitoring of patient vital signs enhances care efficiency.
3. Automated data transfer minimizes manual documentation errors.
4. Immediate alerts for abnormal values enable early risk intervention.
5. Strengthens integrated care and optimizes teamwork workflow for improved clinical performance.

體驗「認」知
Experience the World of Cognition

Can you tell what time it is?
Do you recognize the person in the mirror?

When memory and reality begin to blur,
even the simplest acts of judging and recognizing
can become difficult.
Dementia does not only affect memory—
it alters a person's understanding of time, space,
and even of themselves.

In this experience,
we invite you to step into the perspective
of a person living with dementia—
to feel the confusion, disorientation,
and uncertainty they may face.

Through this immersive journey,
we hope you will reflect on what it truly means
to understand,
and learn to walk alongside people with dementia
with greater patience, empathy, and care.

地中海飲食評分工具
Mediterranean (Medi) Diet Scoring Tool

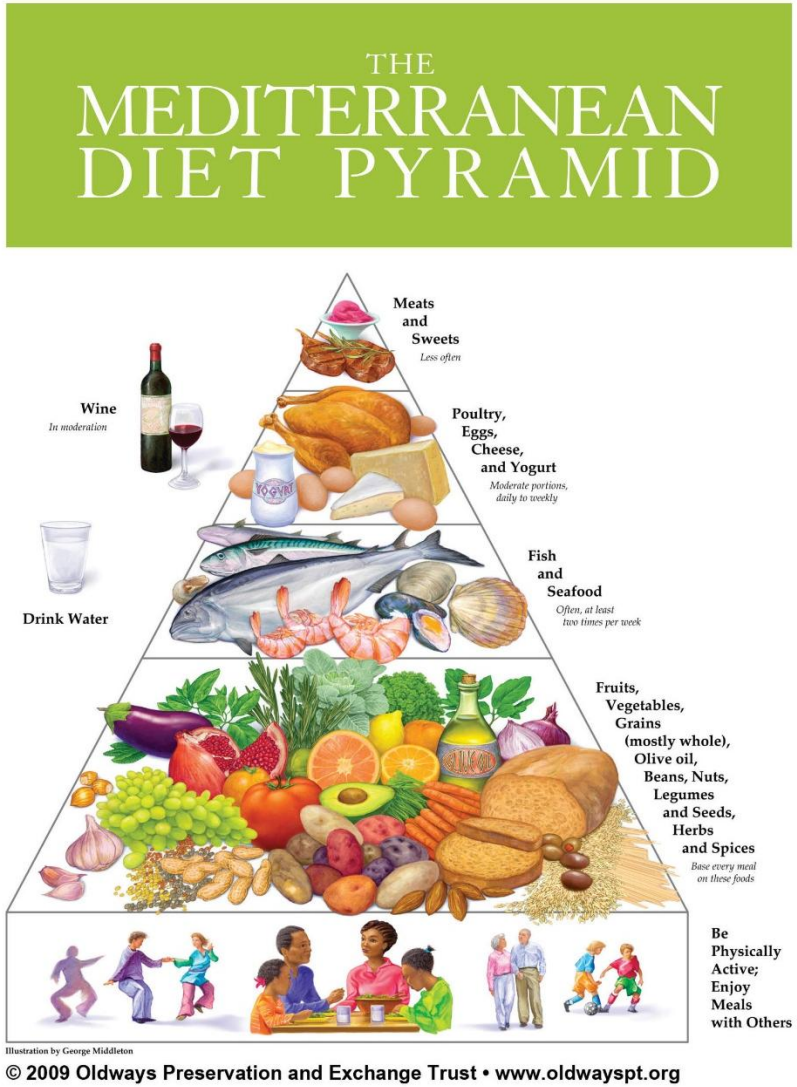
Mediterranean (Medi) Diet Scoring Tool

Complete the Medi diet Score Tool to see your baseline score out of 14 points. Studies show higher Medi diet scores are associated with better heart and mental health and a 32% reduced risk of depression. To learn more about the Medi diet, meet with the Registered Dietitian in your doctor's office.

	Question	Yes	No	Key Nutrition Concepts
1.	Is olive oil the main source of fat used in cooking?			Choose Healthier Fats Olive oil is high in healthy monounsaturated fat.
2.	Do you have 4 tablespoons (60 ml) or more of olive oil each day? Include oil used for frying, salads, meals away from home.			Healthy fats are better than very low fat diets Drizzle olive oil onto meals or snacks.
3.	Do you sauté with olive oil, garlic, onion, tomato to make homemade sauce 2 or more times per week?			Prepare homemade sauces for pasta, rice or vegetables.
4.	Do you eat 4 servings or more of vegetables each day? (1 serving is 125 ml or 250 ml raw leafy greens)			Eat plenty of fruits and vegetables Fruits and vegetables add fiber to the diet along with antioxidants and many vitamins and minerals for optimal health.
5.	Do you have 3 or more fruits or 1.5 cups or more of fruit each day? (1 serving= 1 fruit or 125 ml)			
6.	Do you eat nuts 3 or more times per week? (1 serving is 30 grams or 60 ml)			Snack on nuts and seeds Nuts are rich in unsaturated fat, phytosterols, fibre, vitamin E and iron, e.g. walnuts, almonds, hazelnuts. Enjoy daily. Chew well.
7.	Do you have 3 or more servings of fish or seafood each week? (1 fish serving is 3.5-5 oz or 100-150 g, or 200g seafood or 4-5 pieces)			Eat fish rich in omega-3 fats Salmon, trout, mackerel, sardines, herring, anchovies contain omega-3 fats (EPA and DHA) for heart and brain health.
8.	Do you have 3 or more servings of legumes (peas, beans, or lentils) each week? (1 serving is 175 ml or 150 g)			Increase foods rich in soluble fibres Legumes are high in fiber, protein, potassium and other essential nutrients. Add legumes such as beans, peas and lentils several times a week.
9.	Do you eat chicken or turkey more often than beef, pork, hamburger or sausage?			Choose lean proteins with little visible fat.
10.	Do you eat less than 2 servings of red meat or processed meats each day including hamburger, ham or sausage? (1 serving is 75 g)			Choose lean meats and consider cooking methods Include fish, poultry, legumes (beans, peas, lentils), nuts and seeds often in the week. Reduce processed meats and deep-fried foods.
11.	Do you eat 1 tablespoon (15 ml) or less of butter, margarine or cream each day?			Add fats rich in mono and poly unsaturated fats Instead of cream and butter, choose plant-based fats like oils, nuts and seeds.
12.	Do you eat commercial baked goods such as cookies, doughnuts or cake less than 2 times per week?			Eat less processed food Sweets can be high in saturated fat, salt or sugar. Enjoy once in a while.
13.	Do you have less than 1 can (355 ml or 12 oz) of sugar sweetened beverages each day?			Limit sweet drinks like pop, sports drinks, juice, flavoured or iced coffees to avoid excess added sugars.
14.	Do you drink 7 or more glasses of wine each week? (1 serving is 3-6 oz)			If you drink alcohol, drink in moderation. If you don't currently drink alcohol, don't start. If you have questions about alcohol, discuss with your health care provider. Adolescents under 19 years of age and pregnant women should avoid alcohol.
TOTAL SCORE (total no. of 'yes' answers) Pick 1-2 areas to work on.				.

Nutrition Program, Hamilton Family Health Team. Modified from the Dietitians of Canada Ontario Primary Health Care Action Group Mediterranean Diet Toolkit. Adapted from tools produced by Alison Hornby and Katherine Paterson BACPR 2012 and the PREDIMED study www.Predimed.es, Estruch et al. Primary Prevention of Cardiovascular Disease with a Mediterranean Diet Supplemented with Extra Virgin Olive Oil and Nuts. N Engl J Med 2018; 379;1387-1389. DOI: 10. 1056/NEJMc1809971.

地中海飲食金字塔
The Mediterranean Diet Pyramid



The Mediterranean diet pyramid was developed based on the eating habits of long-living adults in the Mediterranean. It follows a general food pyramid guideline (not specific quantities) and encourages communal eating and an active lifestyle.

It is associated with:

- Reduced risk of memory problems and dementia[1]
- Reduced risk of stroke, diabetes, and other vascular diseases[2]

Base every meal around:

- Vegetables and fruits (the darker in color, the more anti-oxidants!)
- Legumes/beans, whole grains, nuts (e.g., lentils, walnuts)
- Olive oil as principal source of fat (swap out margarine and butter!)

Eat at least 2x/week:

- Fish, seafood

Eat moderate portions daily to weekly:

- Poultry
- Dairy, cheese and eggs
- Red wine (typically with meals)
  - Females: 1 glass/day
  - Males: 2 glasses/day

Eat less often than other foods:

- Red meat
- Saturated fat
- Sweets

1 Feart, Catherine, et al. "Adherence to a Mediterranean diet, cognitive decline, and risk of dementia." JAMA 302.6 (2009): 638–648.

2 Psaltopoulou, Theodora, et al. "Mediterranean diet, stroke, cognitive impairment, and depression: a meta-analysis." Annals of Neurology 74.4 (2013): 580–591.
"Mediterranean-style diets linked to better brain function in older adults" www.sciencedaily.com/releases/2017/07/170725154208.htm.
UNESCO Intangible Cultural Heritage "Mediterranean Diet" ich.unesco.org/en/RL/mediterranean-diet-00884.

UCSF Weill Institute for Neurosciences
Memory and Aging Center