**Basic Information**

* **Name**: Rachel Kim
* **Age**: 52
* **Gender**: Female
* **Medical Condition**: Type 2 Diabetes, Mild Hypertension
* **Primary Goal**: Stabilize blood sugar levels, improve overall health metrics, reduce reliance on medication.

**Previous Medical Records**

* **Doctor Visits**:
  + **2024-10-01**: Annual check-up; HbA1c at 8.2%, blood pressure at 135/90 mmHg. Adjusted diabetes medication (added Metformin 500mg twice daily).
  + **2024-07-15**: Podiatrist appointment for early signs of diabetic neuropathy; recommended custom orthotics.
  + **2024-04-10**: Nutritionist consultation; advised reducing processed carbs and increasing lean protein intake.
  + **2023-12-01**: ER visit for hypoglycemia episode; blood glucose dropped to 55 mg/dL after missed lunch and high insulin dose.
* **Medications**:
  + Metformin 500mg (twice daily).
  + Amlodipine 5mg (once daily for hypertension).
  + Atorvastatin 20mg (for cholesterol management).
* **Lab Results**:
  + **2024-10-01**:
    - HbA1c: 8.2% (elevated).
    - Fasting Blood Glucose: 165 mg/dL.
    - LDL: 130 mg/dL (elevated).
    - HDL: 40 mg/dL (low).

**Wearable Data (from Fitness Tracker):**

* **Blood Glucose Monitoring (CGM)**:
  + Daily Averages:
    - Fasting: 165 mg/dL.
    - Post-meal: Peaks at 220 mg/dL, often drops to 70-80 mg/dL after 3 hours.
* **Heart Rate**:
  + Resting: 78 bpm.
  + During Activity: Peaks at 150 bpm during brisk walking.
* **Activity Levels**:
  + Steps: 6,000 daily average.
  + Active Minutes: 40 minutes/day (below goal of 60 minutes).
  + Sedentary Time: 12 hours/day (work and leisure).
* **Sleep Patterns**:
  + Average Sleep Duration: 6.5 hours.
  + Sleep Quality: Poor (frequent waking due to nocturia).
  + REM Sleep: 1.5 hours/night.

**Health Trends:**

* Frequent energy dips mid-afternoon (2-3 PM).
* Weight gain of 5 lbs over the last 6 months.
* High fasting glucose spikes after carb-heavy dinners.

**Emergency Indicators:**

* Hypoglycemia episodes: Reported 2 instances in the last 3 months.
* High-risk scenarios: Skipping meals or missing medication doses.

 **Additional Medical History:**

* **Ongoing Therapies:** Attends monthly physiotherapy sessions to improve foot strength due to mild diabetic neuropathy.
* **Family History:** Both parents had diabetes; father had a history of cardiovascular disease.
* **Past Surgeries:** Appendectomy (age 25), cataract surgery (age 48).

 **Wearable Data (Detailed):**

* **Sleep Monitoring:** Wakes up 2-3 times per night, primarily due to nocturia. Uses a smart light system to minimize sleep disruption.
* **Heart Rate Zones:**
  + Light Activity: 95-115 bpm.
  + Fat Burn: 120-135 bpm.
  + Peak Activity: 150-160 bpm during intense brisk walks.
* **Blood Glucose Analysis:**
  + Rare nocturnal hypoglycemia detected between 3-4 AM.

 **Nutrition Trends:**

* Observes better fasting glucose control when dinner includes high-fiber foods like lentils.
* Avoids bananas and grapes as they lead to rapid glucose spikes.

 **Emergency Scenarios:**

* Documented response plan for hypoglycemia: Consumes a 4 oz glass of orange juice and monitors blood glucose every 15 minutes until stable.

 **Health Goals Updates:**

* Reduce HbA1c to <7.0% in the next 6 months.
* Improve LDL cholesterol to <100 mg/dL by introducing more omega-3-rich foods.

**Life-Style Information**

**Basic Information**

* **Name**: Rachel Kim
* **Age**: 52
* **Gender**: Female
* **Primary Goal**: Manage Type 2 Diabetes through lifestyle changes, improve fitness, and reduce stress.

**Dietary Plans**

**Current Diet:**

* **Breakfast**:
  + 2 boiled eggs, 1 slice of whole-grain toast, 1 cup black coffee (no sugar).
* **Mid-Morning Snack**:
  + Handful of unsalted almonds (15-20 nuts).
* **Lunch**:
  + Grilled chicken breast, sautéed spinach, 1/2 cup quinoa.
* **Afternoon Snack**:
  + Low-fat Greek yogurt (plain, 5 oz).
* **Dinner**:
  + Baked salmon, steamed asparagus, small sweet potato (roasted).

**Dietary Restrictions:**

* Low glycemic index (GI) foods only.
* Avoids sugary snacks, white bread, and processed foods.
* Limited alcohol intake (1 glass of red wine per week).

**Supplementation:**

* Multivitamin tailored for diabetics.
* Fish oil capsules (1,000 mg/day).
* Vitamin D3 (2,000 IU/day).

**Hydration:**

* Averages 8 cups of water daily.
* Drinks green tea twice a day (morning and afternoon).

**Exercise Routine**

**Current Physical Activity:**

* **Daily Walks**: 20-30 minutes after dinner (light intensity).
* **Strength Training** (to build muscle and improve glucose metabolism):
  + Monday & Thursday: 20 minutes (light weights focusing on upper body).
* **Stretching**:
  + 10 minutes daily in the morning (focus on lower back and hamstrings).

**Cardio Plan (Doctor-approved):**

* Saturday: 45-minute brisk walk.
* Tuesday: 20 minutes on a stationary bike.

**Leisure Activities**

* Weekly Book Club: 1-hour discussion every Friday evening.
* Gardening: Spends 2 hours on Sunday tending to her backyard garden.
* Meditation: Practices 15 minutes of guided mindfulness meditation 5 times a week.
* Family Time: Plays board games with grandchildren every Wednesday evening.

**Sleep Routine**

* **Schedule**:
  + Bedtime: 10:00 PM.
  + Wake Time: 6:30 AM.
* **Sleep Quality**:
  + Reports light sleep 3 nights a week due to frequent waking.
  + Uses a CPAP machine for mild obstructive sleep apnea.
* **Improvement Goals**:
  + Reduce nighttime waking from 3 to 1 time per night.
  + Achieve a consistent 7-8 hours of sleep nightly.

**Stress Management**

* **Current Practices**:
  + Journals before bed (gratitude entries).
  + Attends a weekly yoga class (Thursdays, 1 hour).
  + Enjoys watching cooking shows in the evening as a way to unwind.
* **Stress Triggers**:
  + Overwhelmed by medical appointments and test results.
  + Concerned about family history of diabetes complications.

**Lifestyle Trends**

* **Dietary Compliance**: 80% adherence to diabetic-friendly meals, occasional slips during holidays or family gatherings.
* **Exercise Adherence**: Misses planned strength training sessions 20% of the time due to fatigue.
* **Hydration**: Maintains good water intake but forgets occasionally on busy days.
* **Leisure**: Finds gardening the most relaxing activity but wishes to expand outdoor hobbies.

**Data Expansion**

1. **Dietary Additions:**
   * **Weekly Indulgence:** Allows a small portion of dark chocolate (85% cocoa) on Sunday evenings to satisfy cravings.
   * **Meal Timing:** Eats dinner by 7:00 PM to improve digestion and glucose levels.
2. **Exercise Routine (Updated):**
   * **Yoga Additions:** Introduced 15-minute evening yoga for relaxation after dinner.
   * **Seasonal Changes:** Switches to indoor treadmill walking during winter months.
3. **Leisure Activities:**
   * Recently started exploring birdwatching in local parks as a relaxing weekend activity.
   * Volunteers at a community center twice a month for diabetes education sessions.
4. **Sleep Hygiene:**
   * **New Initiatives:** Uses white noise machines to reduce environmental disruptions.
   * **Technology Limitations:** Avoids screen time 1 hour before bedtime.
5. **Stress Management Improvements:**
   * Added deep breathing exercises during afternoon breaks.
   * Uses a mobile app to track mood and identify patterns in stress triggers.