# Input data

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| Data blocks | Common Sources | Data Example |
| Physical Activity / Steps | Smartphones (Apple Health, Google Fit), Fitness Trackers (Fitbit, Garmin), Manual Entry | Date, Steps: 2024-11-06, 10,235 |
| Sleep Records | Wearable Devices (Fitbit, Oura Ring), Sleep Apps (Sleep Cycle, Pillow), Manual Entry | Date, Sleep Start, Sleep End, Total (hrs): 2024-11-06, 22:30, 06:30, 8.0 |
| Heart Rate | Wearables (Apple Watch, Fitbit, Garmin), Chest Straps (Polar H10), Manual Entry | Timestamp, Heart Rate (bpm): 2024-11-07 08:00, 72 |
| Body Weight / Body Composition | Smart Scales (Withings, Fitbit), Manual Entry, Body Composition Monitors (Tanita) | Date, Weight (kg), Body Fat (%): 2024-11-07, 70.5, 18.2 |
| Nutrition / Food Intake | Food Tracking Apps (MyFitnessPal, Lose It!), Meal Delivery Services, Manual Entry | Date, Meal, Calories: 2024-11-07, Breakfast, 350 |
| Blood Pressure | Home Monitors (Omron), Wearables, Healthcare Providers | Date, Time, Systolic (mmHg), Diastolic (mmHg): 2024-11-07, 07:00, 120, 80 |
| Blood Glucose Levels | Glucose Meters (Accu-Chek), Continuous Glucose Monitors (Dexcom G6), Healthcare Providers | Date, Time, Blood Glucose (mg/dL): 2024-11-07, 08:00, 105 |
| Fitness Activities / Workouts | Fitness Apps (Strava, Nike Run Club), Wearables (Garmin), Manual Entry | Date, Activity Type, Duration (min): 2024-11-07, Running, 30 |
| Mood / Mental Health | Mood Tracking Apps (Daylio, Moodfit), Journals, Manual Entry | Date, Mood Rating (1-5): 2024-11-07, 4 |
| Hydration | Hydration Apps (Hydro Coach), Smart Water Bottles (HidrateSpark), Manual Entry | Date, Time, Amount (ml): 2024-11-07, 09:00, 250 |
| Oxygen Saturation (SpO2) | Wearables (Apple Watch, Fitbit), Pulse Oximeters, Healthcare Providers | Date, Time, SpO2 (%): 2024-11-07, 07:30, 98 |
| Symptoms / Health Notes | Symptom Tracker Apps (Flaredown), Manual Entry, Journals | Date, Symptom, Severity (1-10): 2024-11-07, Headache, 5 |
| Medications | Medication Tracking Apps (Medisafe, MyTherapy), Manual Entry, Pharmacy Records | Date, Time, Medication, Dosage: 2024-11-07, 08:00, Lisinopril, 10mg |
| Menstrual Cycle Tracking | Period Tracking Apps (Clue, Flo), Manual Entry, Fertility Monitors | Date, Cycle Phase, Symptoms: 2024-11-07, Ovulation, Mild cramping |
| Blood Oxygen Levels | Wearables (Smartwatch), Medical Devices (Pulse oximeters), Manual Entry | Date, Time, Blood Oxygen (%): 2024-11-07, 07:00, 98 |
| Stress Levels | Wearables (HRV measurement: Apple, Fitbit), Stress Tracking Apps (StressScan), Manual Entry | Date, Time, Stress Level (1-10): 2024-11-07, 14:00, 6 |
| Body Temperature | Wearables (Oura Ring), Thermometers, Manual Entry | Date, Time, Temperature (°C): 2024-11-07, 07:00, 36.6 |
| Respiratory Rate | Wearables, Medical Devices, Manual Entry | Date, Time, Respiratory Rate (breaths/min): 2024-11-07, 06:00, 16 |
| Lab Test Results | Healthcare Providers, Patient Portals, Manual Entry | Date, Test, Result, Units: 2024-11-06, Hemoglobin A1c, 5.5, % |
| Genetic Data | Genetic Testing Services (23andMe, AncestryDNA), Manual Upload, Healthcare Providers | rsid, Chromosome, Position, Genotype: rs123456, 1, 123456789, AG |

# Output visuals

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| Visual | Description | Data Needed |
| Steps Trend (Line Chart) | Daily/weekly moving average of steps to observe if activity levels are consistent, increasing, or decreasing. | Date, Steps (from Physical Activity) |
| Sleep Quality Comparison (Stacked Bar Chart) | Visualization of daily sleep hours split by sleep stages (Deep Sleep, REM, etc.) to monitor consistency. | Date, Total Sleep (hrs), Deep Sleep (hrs), REM Sleep (hrs) (from Sleep Records) |
| Resting Heart Rate Trend (Line Chart) | Chart of the user's resting heart rate over time, highlighting patterns or long-term improvements or declines. | Date, Resting Heart Rate (from Heart Rate) |
| Weight & Body Fat Progress (Dual-Line Chart) | Tracks weight and body fat percentage. Observing downward trends could indicate fat loss or inconsistencies. | Date, Weight (kg), Body Fat (%) (from Body Weight/Composition) |
| Weekly/Monthly Workout Breakdown (Bar Chart) | A breakdown of exercise types (running, cycling, etc.) over a selected period to quickly see workout balance and frequency. | Date, Activity Type, Duration (min), Calories Burned (from Fitness Activities) |
| Blood Pressure Range (Scatter Plot) | Scatter plot of systolic and diastolic blood pressure over time, with warning zones for healthy/unhealthy ranges. | Date, Systolic (mmHg), Diastolic (mmHg) (from Blood Pressure) |
| Blood Glucose Levels (Time-Series Chart) | Display blood glucose levels throughout the day for diabetics or those monitoring, with indicators for hypo/hyperglycemia. | Date, Time, Blood Glucose (mg/dL) (from Blood Glucose) |
| Calories In vs Calories Burned (Dual Bar Chart) | Tracks daily caloric intake against calories burned to help users manage weight or improve fitness. | Date, Calories Consumed (from Nutrition), Calories Burned (from Activities) |
| Mood vs Sleep Quality (Scatter Plot) | Scatter plot showing correlation between mood and sleep, providing insight into how poor sleep affects emotional wellbeing. | Date, Sleep Quality, Mood Rating (from Mood/Mental Health, Sleep Records) |
| Hydration and Activity Correlation (Line Chart) | Line chart showing hydration levels compared to physical activity levels to help users manage hydration during exercise. | Date, Time, Hydration (ml), Steps/Exercise Duration (from Hydration, Fitness Activities or Steps) |
| Oxygen Saturation Trend (Line Chart) | Tracks oxygen saturation (SpO2) over time, useful for identifying respiratory issues or for athletes monitoring altitude exposure. | Date, Time, SpO2 (%) (from Oxygen Saturation) |
| Symptoms Over Time (Timeline) | A timeline of symptoms to detect correlations with health issues, activities, or lifestyle changes. | Date, Symptom, Severity (from Symptoms/Health Notes) |
| Sleep vs Activity Energy Balance (Bar or Stacked Chart) | Compare energy expenditure (activity) and recovery (sleep) to balance out fatigue and recovery cycles. | Date, Sleep (hrs), Activity Levels (Steps/Calories burned) (from Sleep Records, Physical Activity/Fitness) |
| Heart Rate Variability & Stress (Scatter Chart) | Track heart rate variability day-by-day and correlate with user-reported stress levels for better stress management. | Date, Heart Rate Variability (HRV, from Heart Rate), Stress Level (from Mood/Stress Level Data) |
| Menstrual Cycle & Symptoms (Line Chart or Calendar Heatmap) | Chart menstruation patterns (with symptoms) to assess cycle health and overall balance, especially for reproductive health. | Date, Cycle Phase, Symptoms (from Menstrual Cycle Tracking, Symptoms/Health Notes) |