

VitalSenseAI Health Report

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PATIENT INFORMATION

Name:	Debonita Chakraborty
Age:	21 years
Gender:	Female
Contact:	1234567890

VITAL SIGNS SUMMARY

Vital Parameter	Measured Value
Heart Rate (BPM)	64.3
Heart Rate Variability (ms)	536.2
SpO2 (%)	96.1
Respiratory Rate (BPM)	19.0
Body Temperature (°C)	36.9
Stress Level	1.9
Blood Glucose Level	90.0
ECG Pattern	Normal
BMI	22.5
Hydration Level	60.0
Cholesterol Level	180.0
Blood Flow Rate	26.6
Fatigue Index	2.9
Sleep Quality Index	80.0
Blood Volume Pulse (BVP)	214.89
Cardiac Output (a.u.)	1381.41
Signal Quality (%)	66.7

AI HEALTH ASSESSMENT

Parameter	Status	Note
Heart Rate (BPM)	Normal	
Heart Rate Variability (ms)	Abnormal	value 536.2 outside (20-200)
SpO2 (%)	Normal	
Respiratory Rate (BPM)	Normal	
Body Temperature (°C)	Normal	
BMI	Normal	
Signal Quality (%)	Normal	

RULE-BASED PARAMETER EVALUATION

Parameter	Status	Reason
Heart Rate (BPM)	Normal	In range (60–100)
Heart Rate Variability (ms)	Abnormal	Outside range (20–200)
SpO2 (%)	Normal	In range (95–100)
Respiratory Rate (BPM)	Normal	In range (12–20)
Body Temperature (°C)	Normal	In range (36.0–37.5)
BMI	Normal	In range (18.5–24.9)
Signal Quality (%)	Normal	In range (60–100)

MEDICAL RECOMMENDATIONS AND ANALYSIS

MEDICAL RECOMMENDATION BASED ON AI HEALTH ASSESSMENT

(This section is generated using Artificial Intelligence API analysis)

■ AI Detected 1 Abnormal Parameter(s)

AI RECOMMENDATIONS:

- Heart Rate Variability (ms):
 - Monitor your heart rate regularly
 - Reduce stress and anxiety
 - Consider consultation with healthcare provider
- NOTE: AI recommendations are generated from pattern analysis and should be considered as informational. Always consult with medical professionals.

RULE-BASED PARAMETER EVALUATION RECOMMENDATIONS

(Recommendations based on trained ML models and clinical rule evaluation)

(This assessment has HIGHER RELIABILITY due to ML model training)

■ ML Model Evaluation Detected 1 Abnormal Parameter(s)

(Based on trained ML models with validated accuracy)

PRIORITY ACTIONS (Based on ML Model Assessment):

■ CRITICAL - CARDIOVASCULAR CONCERNS (Highest Priority):

- Heart Rate Variability (ms) (536.2): Outside range (20–200)
 - IMMEDIATE: Schedule cardiology consultation
 - URGENT: Avoid strenuous activities
 - ACTION: Daily monitoring required

GENERAL RECOMMENDATIONS (ML Model Based):

- Follow doctor's treatment plan strictly
- Take prescribed medications regularly
- Maintain detailed health records
- Schedule follow-up assessments as recommended
- Report any new symptoms immediately

LIFESTYLE MODIFICATIONS (Evidence-Based):

- Diet: 30% increase in fruits and vegetables
- Exercise: 150 minutes of moderate activity per week
- Stress Management: 20-30 minutes daily relaxation
- Sleep: 7-9 hours of consistent sleep schedule
- Hydration: Minimum 2 liters water daily

CLINICAL VALIDATION:

These recommendations are derived from ML models trained on clinical data with validated accuracy (R^2 scores visible in model comparison table).

ML-based recommendations provide HIGHER confidence than AI-only analysis.

MEDICAL DISCLAIMER

This report is generated using artificial intelligence and machine learning models. While recommendations are based on trained ML models and clinical rules, they should NOT replace professional medical diagnosis. Always consult with qualified healthcare professionals for medical advice, diagnosis, and treatment.