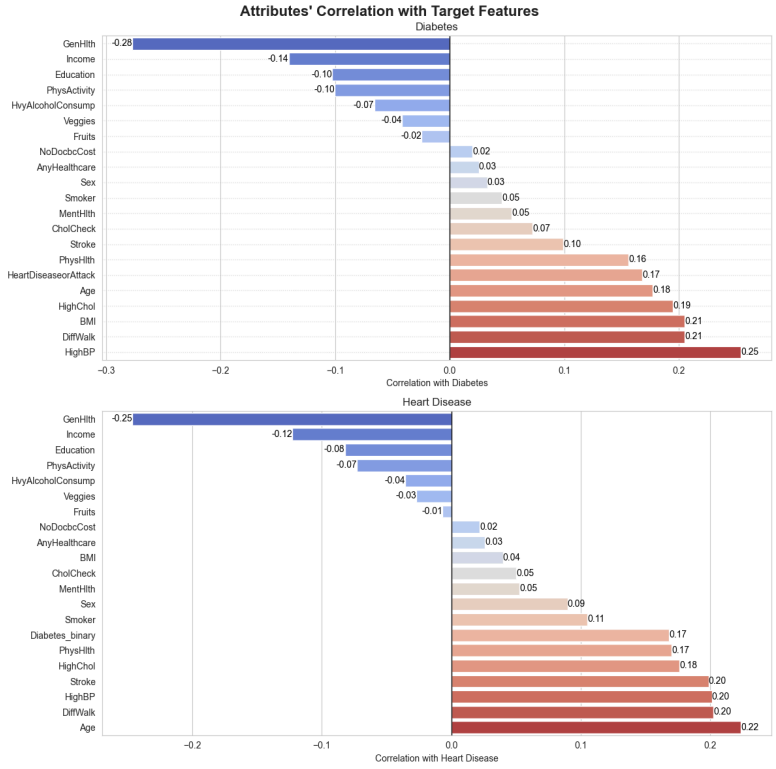
Introduction:

These visualizations explore the connections between lifestyle, health factors, and chronic conditions like diabetes and heart disease. They're based on publicly available survey data from the CDC's 2014 Behavioral Risk Factor Surveillance System (BRFSS), which collects health information from adults across the U.S. While this data shows clear patterns, remember that individual health depends on many factors—use these insights as conversation starters with your doctor, not medical advice.



Understanding Risk Factors: How Different Health Factors Relate to Diabetes and Heart Disease

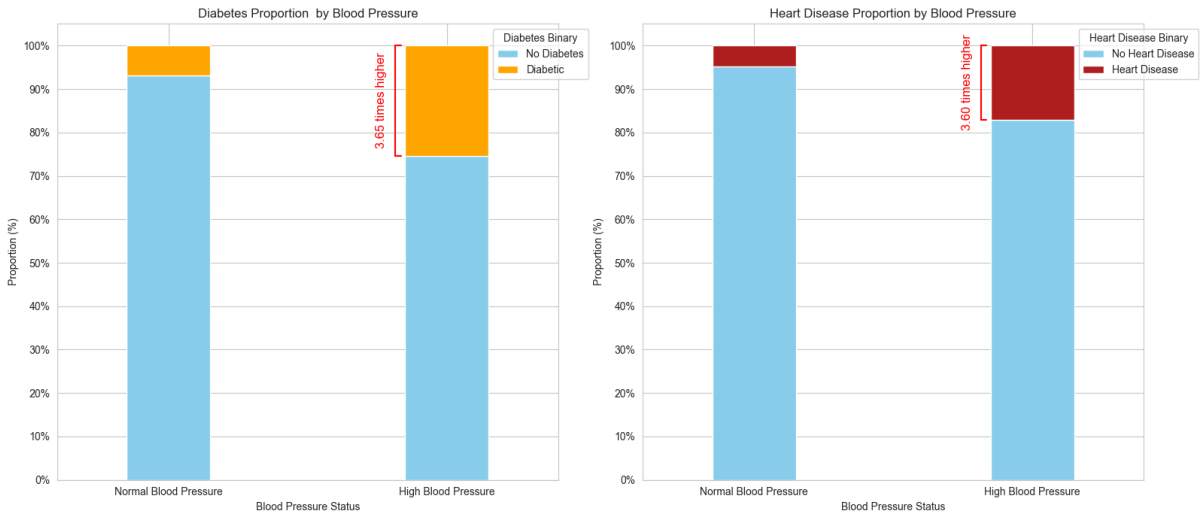
This visualization shows which health factors have the strongest relationships with diabetes and heart disease. The correlation values range from -0.3 to 0.3, where:

- Positive values (red/orange bars to the right) indicate factors that increase risk
- Negative values (blue bars to the left) indicate factors that decrease risk
- Values closer to 0 mean weaker relationships

Key Insights:

- For diabetes, high blood pressure (0.25), high cholesterol (0.19), and age (0.18) show the strongest positive associations
- For heart disease, age (0.22), high blood pressure (0.20), and stroke history (0.20) have the strongest relationships
- Good general health (-0.28 for diabetes, -0.25 for heart disease) and higher income (-0.14 for diabetes, -0.12 for heart disease) appear to be protective factors
- Physical activity shows a negative correlation with both conditions, suggesting that being active may help reduce risk

These patterns highlight the importance of managing blood pressure and cholesterol levels, especially as we age, to reduce the risk of both diabetes and heart disease.



Blood Pressure: A Critical Factor in Diabetes and Heart Disease Risk

These charts reveal a striking connection between high blood pressure and increased risk of both diabetes and heart disease.

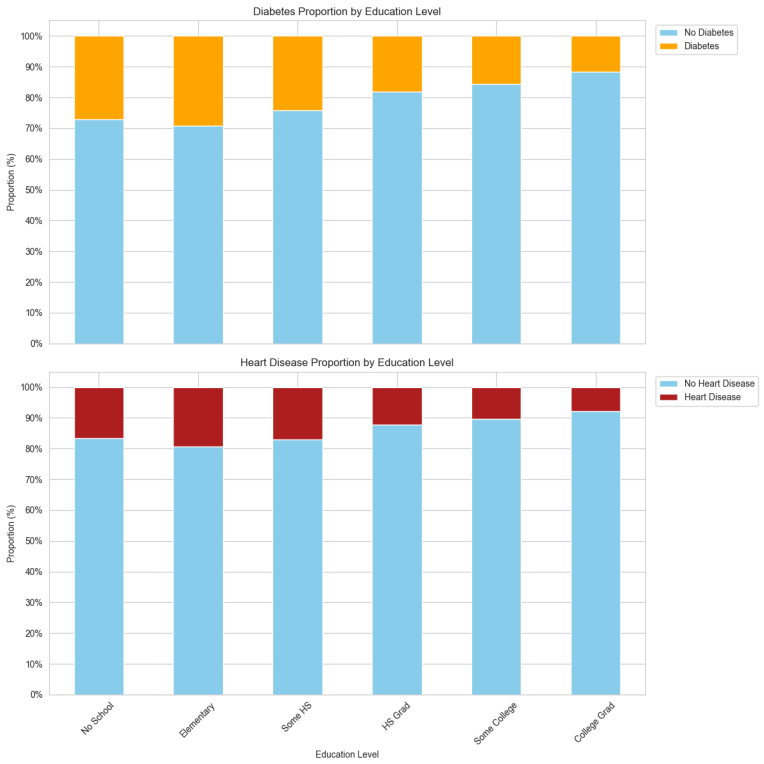
For Diabetes:

- Among people with high blood pressure, about 25% have diabetes (orange portion)
- In contrast, only about 7% of those with normal blood pressure have diabetes
- This means you're about 3.65 times more likely to have diabetes if you have high blood pressure

For Heart Disease:

- The risk is even more pronounced: around 17% of people with high blood pressure have heart disease (red portion)
- Only about 5% of those with normal blood pressure have heart disease
- This translates to being 3.6 times more likely to have heart disease if you have high blood pressure

These findings emphasize the critical importance of maintaining healthy blood pressure levels. Regular blood pressure monitoring and management could significantly reduce your risk of developing these serious conditions.



Education's Impact on Diabetes and Heart Disease Risk

These charts reveal an interesting pattern: higher education levels appear to be associated with lower rates of both diabetes and heart disease.

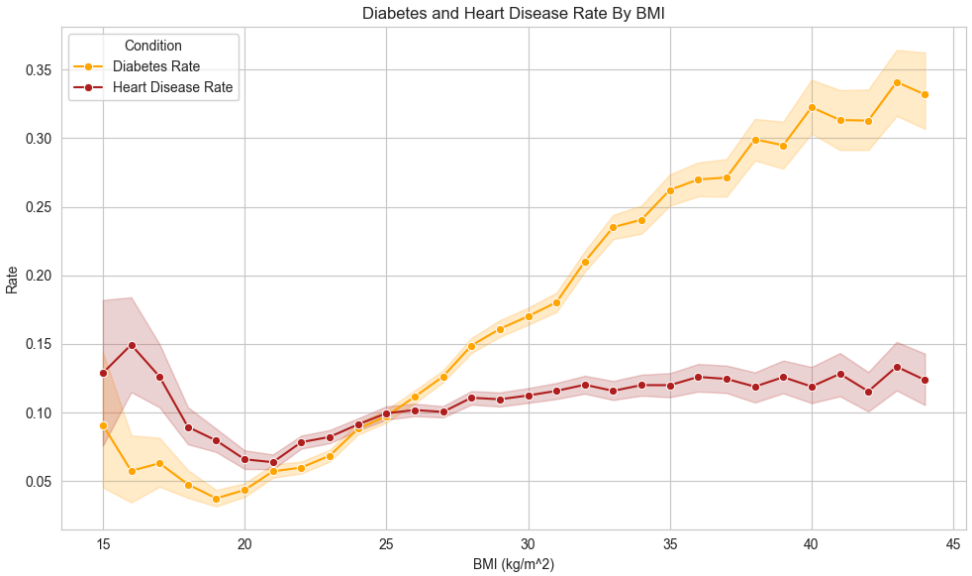
For Diabetes:

- Those with no formal education have the highest diabetes rate at about 27% (orange portion)
- The rate gradually decreases as education increases
- College graduates have the lowest rate at about 12%
- This represents more than a 50% reduction in diabetes prevalence from the lowest to highest education level

For Heart Disease:

- A similar pattern emerges, with about 17% of those with no formal education having heart disease (red portion)
- The rate decreases to about 7% among college graduates
- This trend is consistent across all education levels, showing a clear inverse relationship

These findings suggest that education may play a protective role against both conditions. This could be due to better health literacy, access to healthcare resources, and healthier lifestyle choices that often come with higher education levels. The data underscores the importance of health education and awareness across all educational backgrounds.



BMI and Its Clear Connection to Diabetes and Heart Disease

This line graph tells a compelling story about how Body Mass Index (BMI) relates to the risk of both diabetes and heart disease.

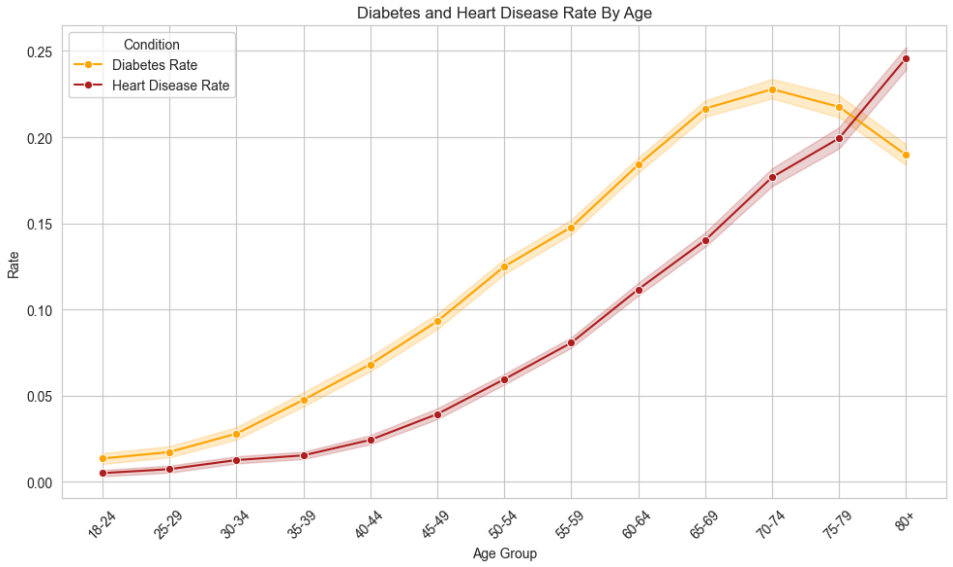
Key Findings:

- For diabetes (orange line), there's a dramatic increase as BMI rises:
    - Low risk (under 5%) for BMI below 20
    - Moderate risk (5-15%) for BMI between 20-30
    - High risk (15-35%) for BMI above 30
- For heart disease (red line), the relationship is more stable:
    - Risk generally stays between 10-15% across all BMI levels
    - Slight increase with higher BMI, but not as steep as diabetes

Important Insights:

- At a BMI of 20, diabetes risk is at its lowest (around 4%)
- After BMI 25, diabetes risk begins to climb sharply
- By BMI 35, diabetes risk triples to over 25%
- Heart disease maintains a relatively consistent 10-13% risk regardless of BMI

This data strongly suggests that maintaining a healthy BMI, particularly below 25, is crucial for diabetes prevention. While BMI also affects heart disease risk, the impact is less pronounced.



How Age Influences Your Risk of Diabetes and Heart Disease

This graph clearly shows how the risk of both diabetes and heart disease increases significantly with age, though their patterns differ.

Diabetes Risk (Orange Line):

- Young adults (18-24) have minimal risk at just 1.4%
- Risk gradually increases through middle age
- Peaks at age 70-74 with 23% risk
- Slightly decreases for those 80+ (19%)

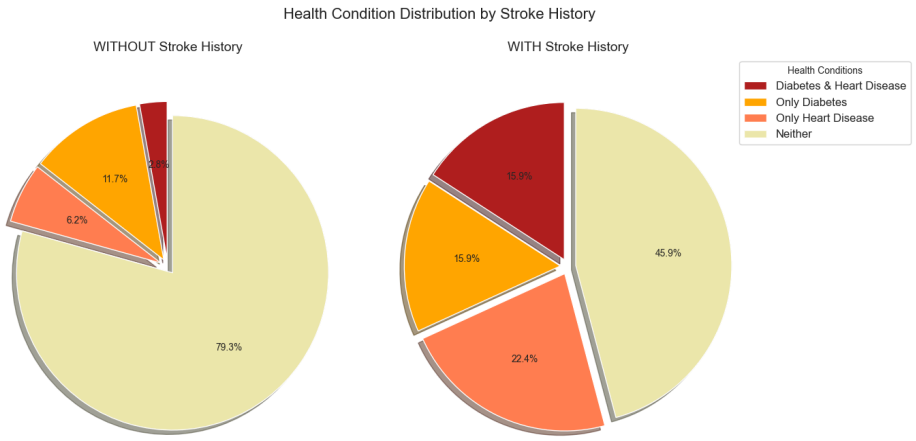
Heart Disease Risk (Red Line):

- Starts very low at 0.7% for young adults
- Rises more slowly than diabetes through middle age
- Continues climbing steadily to 25% for those 80+
- Unlike diabetes, doesn't decline in the oldest age group

Critical Observations:

- Both conditions become significantly more common after age 45
- Diabetes risk accelerates faster in middle age (45-64)
- Heart disease risk continues to rise through all age groups
- By age 80+, both conditions affect nearly 1 in 4 individuals

This pattern emphasizes the importance of preventive health measures as we age, particularly for those entering their 40s and beyond. Regular health screenings become increasingly vital with each passing decade.



The Connection Between Stroke History and Other Health Conditions

These pie charts reveal a striking relationship between stroke history and the prevalence of diabetes and heart disease.

For People WITHOUT Stroke History:

- 79.3% have neither diabetes nor heart disease
- 11.7% have only diabetes
- 6.2% have only heart disease
- 2.8% have both conditions

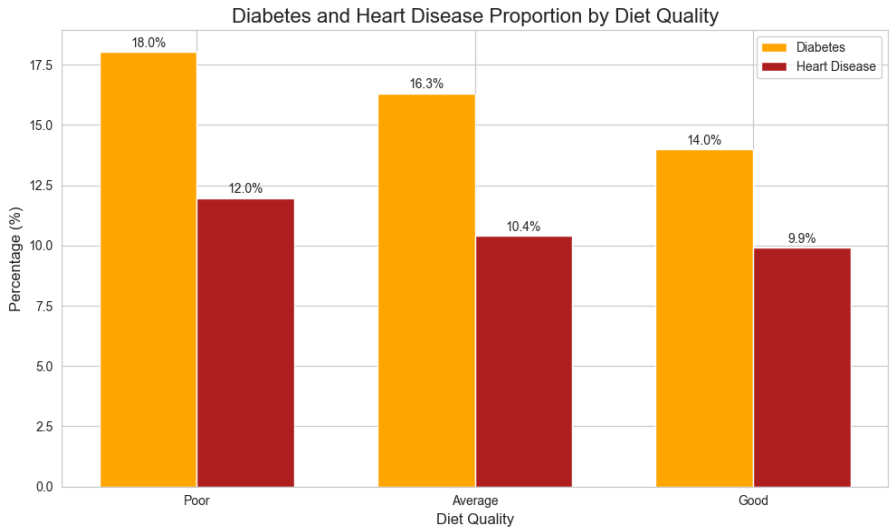
For People WITH Stroke History:

- Only 45.9% have neither diabetes nor heart disease
- 15.9% have only diabetes
- 22.4% have only heart disease
- 15.9% have both conditions

Key Insights:

- Having a stroke history dramatically increases the likelihood of having other conditions
- Heart disease is 3.6 times more common in stroke survivors (22.4% vs 6.2%)
- People with stroke history are 5.7 times more likely to have both diabetes and heart disease (15.9% vs 2.8%)
- Over half (54.1%) of stroke survivors have at least one other condition, compared to just 20.7% of those without stroke history

This data highlights the interconnected nature of these conditions and suggests that stroke survivors need comprehensive health management to address their increased risk of diabetes and heart disease.



Diet Quality Matters: The Impact of Healthy Eating on Diabetes and Heart Disease

This bar chart demonstrates a clear relationship between diet quality and the prevalence of both diabetes and heart disease.

Key Findings:

For Diabetes (Orange Bars):

- Poor diet: 18.0% prevalence
- Average diet: 16.3% prevalence
- Good diet: 14.0% prevalence

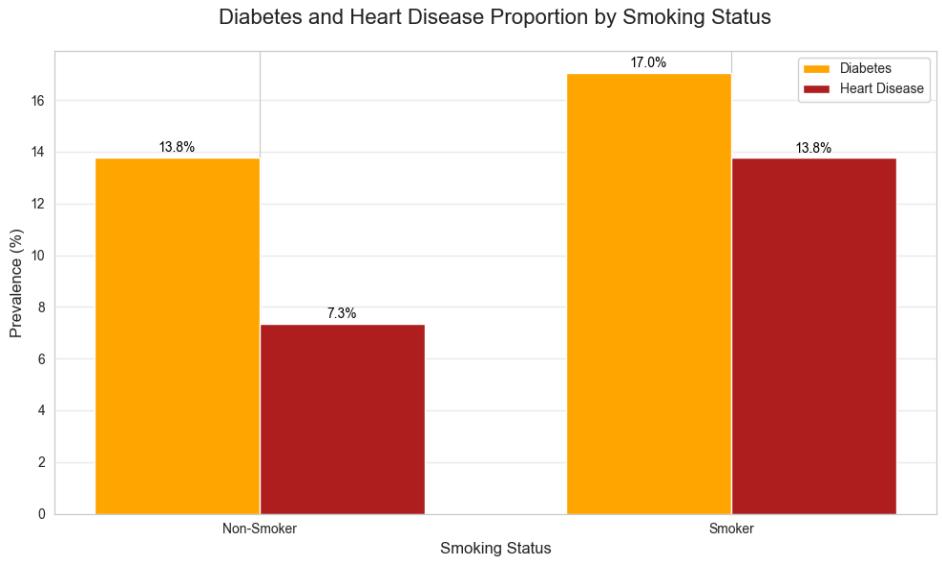
For Heart Disease (Red Bars):

- Poor diet: 12.0% prevalence
- Average diet: 10.4% prevalence
- Good diet: 9.9% prevalence

Important Insights:

- Both conditions show a consistent decrease as diet quality improves
- People with poor diets are 1.3 times more likely to have diabetes compared to those with good diets
- Heart disease risk is about 1.2 times higher in those with poor diets versus good diets
- Improving diet from poor to good quality could reduce diabetes risk by 22% and heart disease risk by 17.5%

This data clearly shows that making better dietary choices – such as eating more fruits and vegetables – can significantly reduce your risk of developing these serious health conditions.



Smoking's Significant Impact on Diabetes and Heart Disease Risk

This bar chart reveals the concerning relationship between smoking status and the prevalence of both diabetes and heart disease.

Key Statistics:

For Diabetes (Orange Bars):

- Non-smokers: 13.8% prevalence
- Smokers: 17.0% prevalence
- Increase: 3.2 percentage points (23% higher risk)

For Heart Disease (Red Bars):

- Non-smokers: 7.3% prevalence
- Smokers: 13.8% prevalence
- Increase: 6.5 percentage points (89% higher risk)

Critical Insights:

- Smoking nearly doubles your risk of heart disease (from 7.3% to 13.8%)
- Diabetes risk increases by nearly a quarter for smokers
- Smokers have the same rate of heart disease (13.8%) as non-smokers have diabetes
- The impact on heart disease is more severe than on diabetes

This data provides compelling evidence that quitting smoking or never starting can significantly reduce your risk of developing these serious health conditions, particularly heart disease.

Closing Thought:

Health risks like high blood pressure or diabetes often develop silently over time. What makes this data powerful is how it reveals patterns we can actually do something about—whether it’s getting checked more often or making small, sustainable changes. Your future self will thank you.