



# **WHAT FACTORS DRIVE OBESITY IN MEXICO?**

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Media blames high-calorie foods

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Testing if high-calorie foods explains obesity

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Analyzing diet, activity, and habits to identify key lifestyle differences.

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## Model

Predicts obesity and recommends lifestyle changes.

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## Summary

Recapping key findings and the main drivers of obesity.

01

# Background

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# 70% of adults in Mexico are overweight or obese.



# Understanding Obesity in Mexico



**Health Concerns:** Obesity increases risk of diabetes, heart disease and high blood pressure.

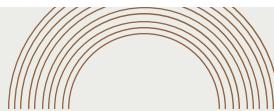


**Contributing Factors:** Diet, activity level, lifestyle choices and demographics.



**Media Perspective:** News often blames highly caloric foods for rising obesity rates.

## Mexico to tackle obesity with taxes on junk food and sugary drinks





02

# Aims

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# Project Goals

-  Investigate causes: diet, lifestyle, activity, and demographics
-  Test media claims about high-calorie foods
-  Building a model to predict obesity and suggest lifestyle improvements





03

# Initial Findings

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# Demographic



**Age:** Metabolism and lifestyle changes



**Height:** Used to Calculate BMI.

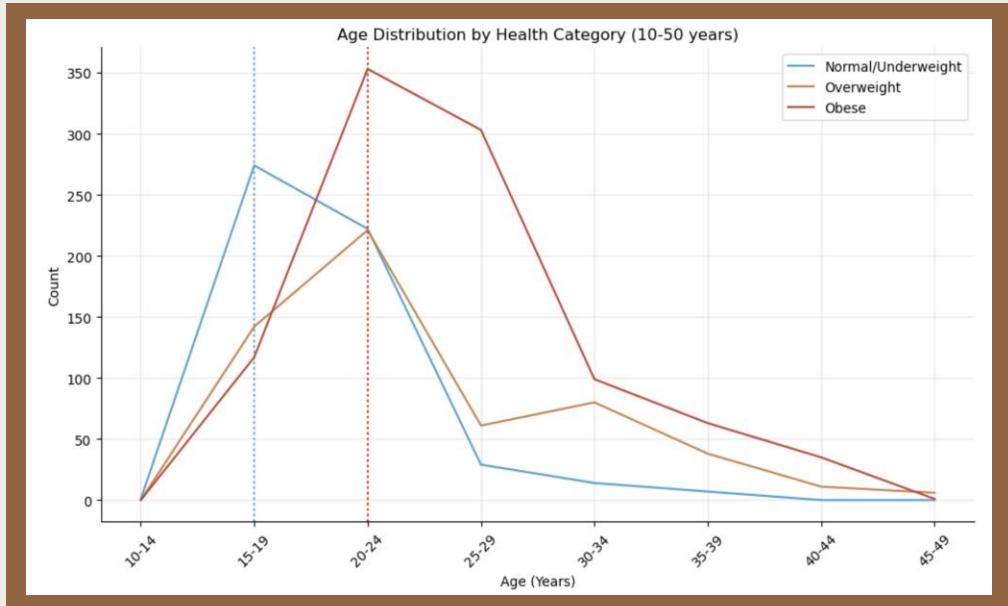
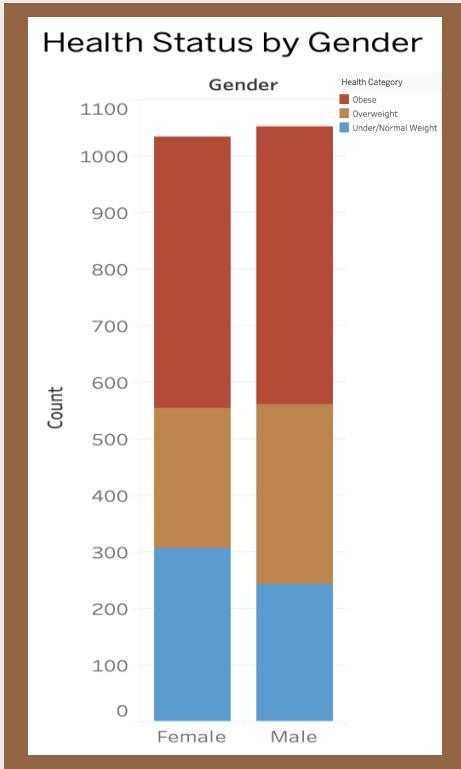


**Gender:** Fat Distribution and hormones.



**Weight:** Indicates body Mass

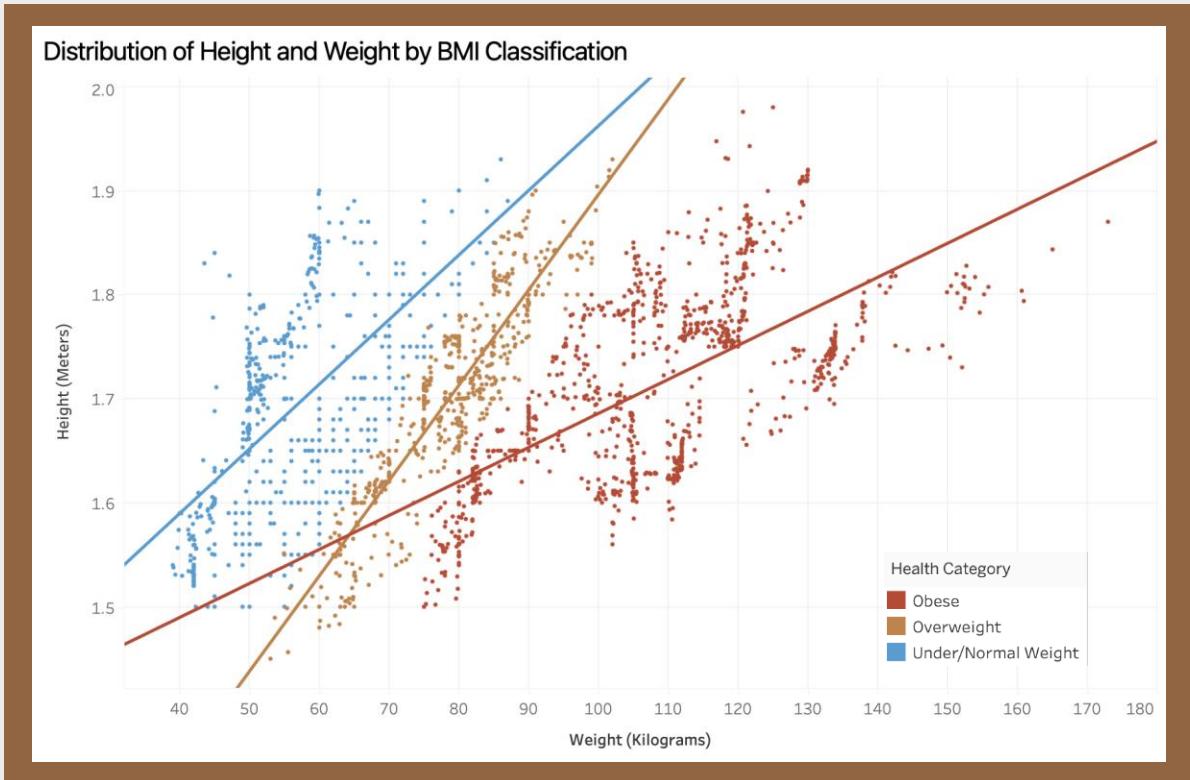
# Age and Gender



- Health category distribution is similar across both genders.
- **60%** of participants are aged 15–25
- Obesity rates by age:
  - 20–25 years: **45%**
  - 15–19 years: **18%**

# Weight and Height

- Weight is a key factor determining health category
- Height appears to minimal impact on health category



# Diet and Nutrition



**Water Intake:** Supports appetite regulation.



**Vegetable Intake:** Adds nutrients that aid weight management.

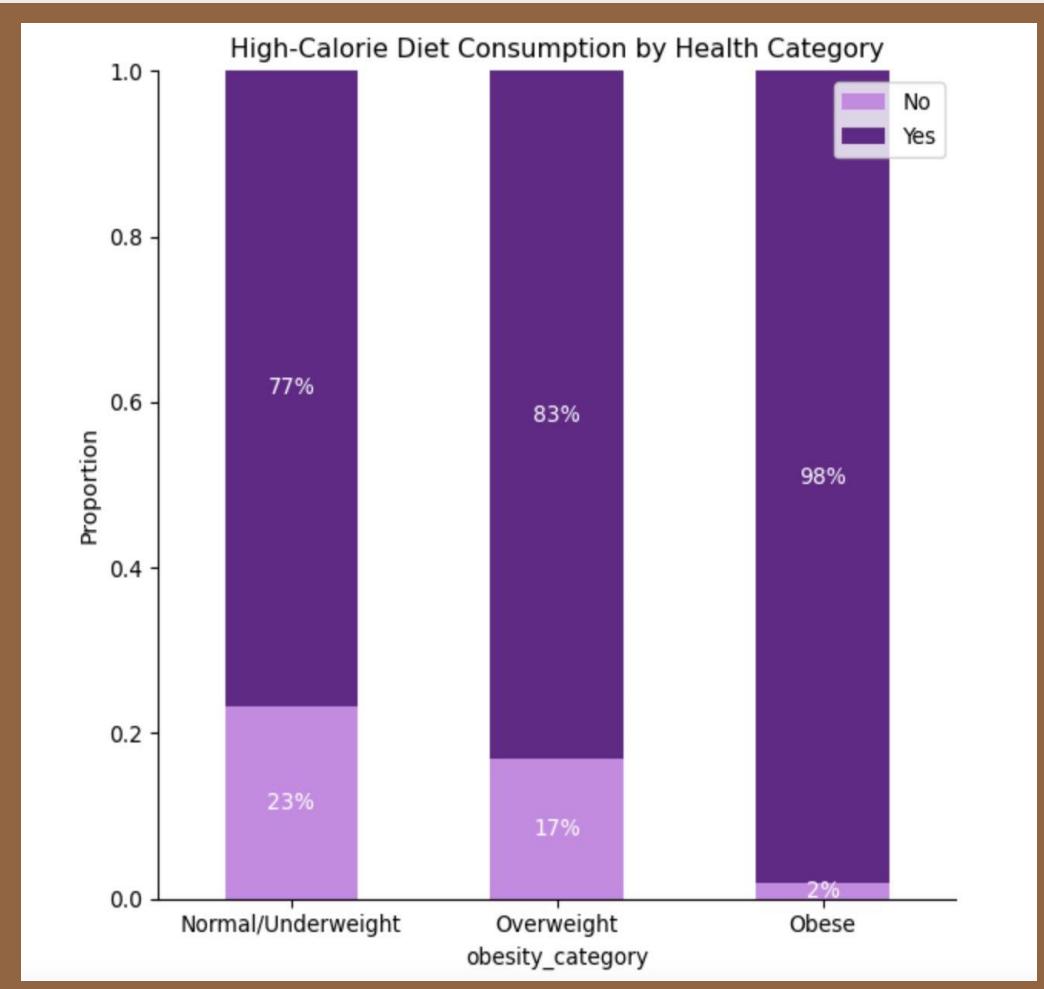


**High-Calorie Intake:** Leads to excess energy storage and weight gain.



# High-Calorie Consumption

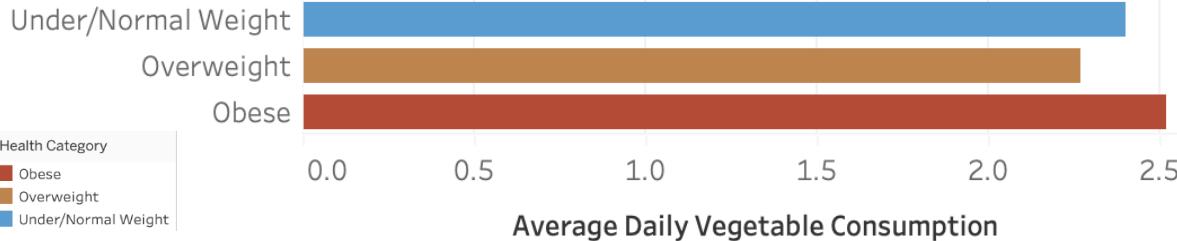
- High-calorie diets are **21%** more prevalent in obese individuals compared to the under/normal weight category.



# Water and Vegetable Consumption

## Average Daily Vegetable Consumption by Health Category

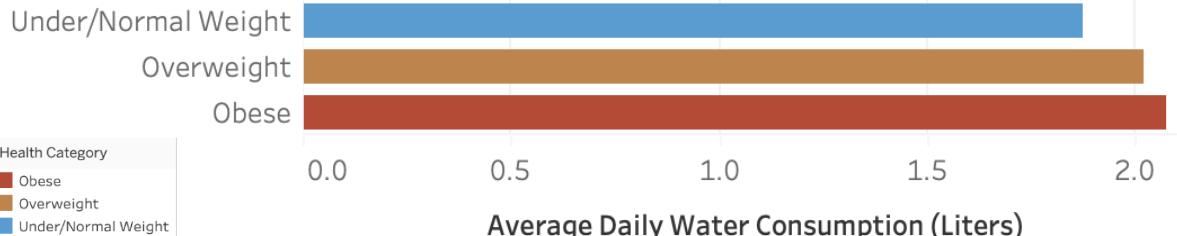
Obesity Category =



- Average vegetable and water intake is similar across all groups, showing minimal effect on obesity

## Average Daily Water Consumption by Health Category

Obesity Category =





# Lifestyle



**Transportation:** Motorized Transportation use reduces daily activity.

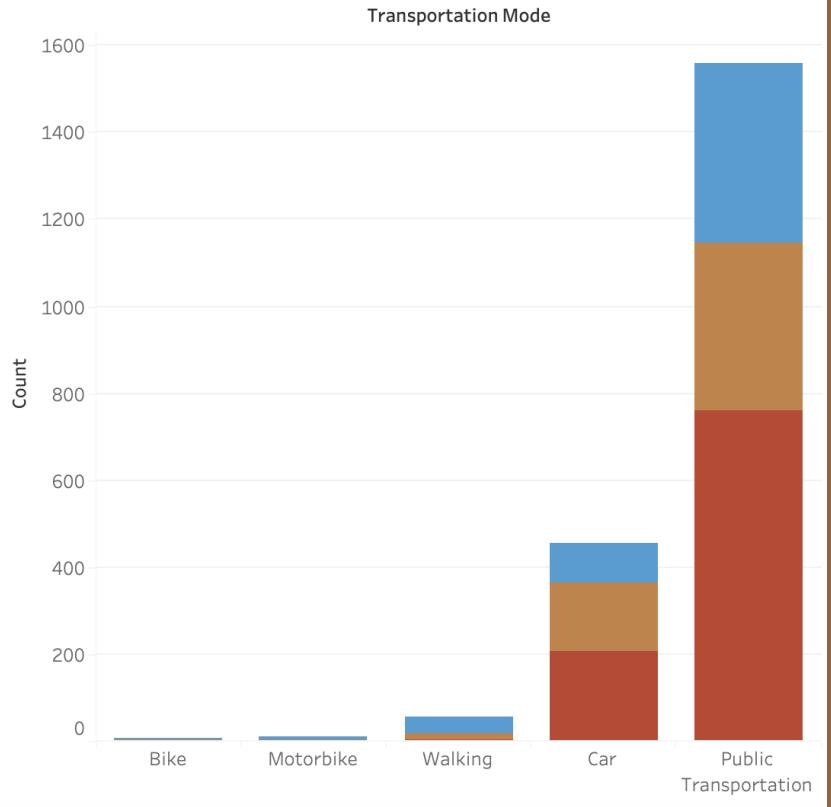


**Physical Activity:** Less movement increases obesity risk.



# Transportation

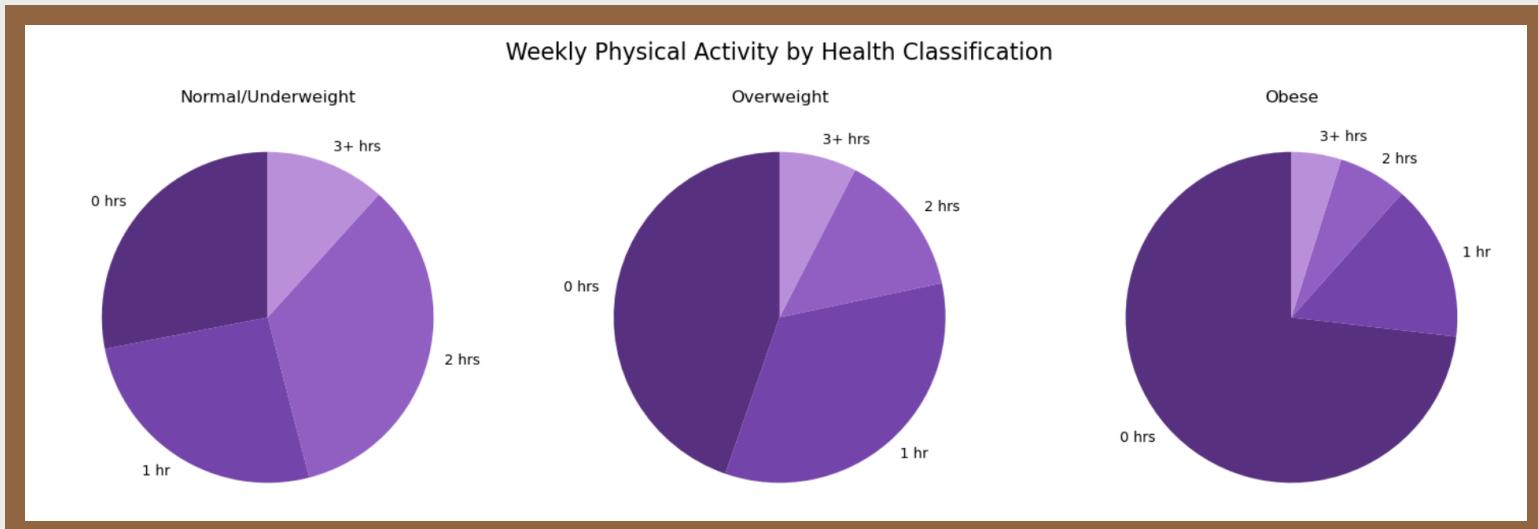
Transport Choices Across Health Categories



- **0%** of obese individuals use walking or cycling as their main mode of transport.
- Public transport is the top mode for all health categories

# Physical Activity

- **46%** of the normal/underweight group do 2+ hours of physical activity.
- **45%** of overweight individuals report doing 0 hours of physical activity.
- Physical inactivity is highest in the obese group, with **71%** doing 0 hours.





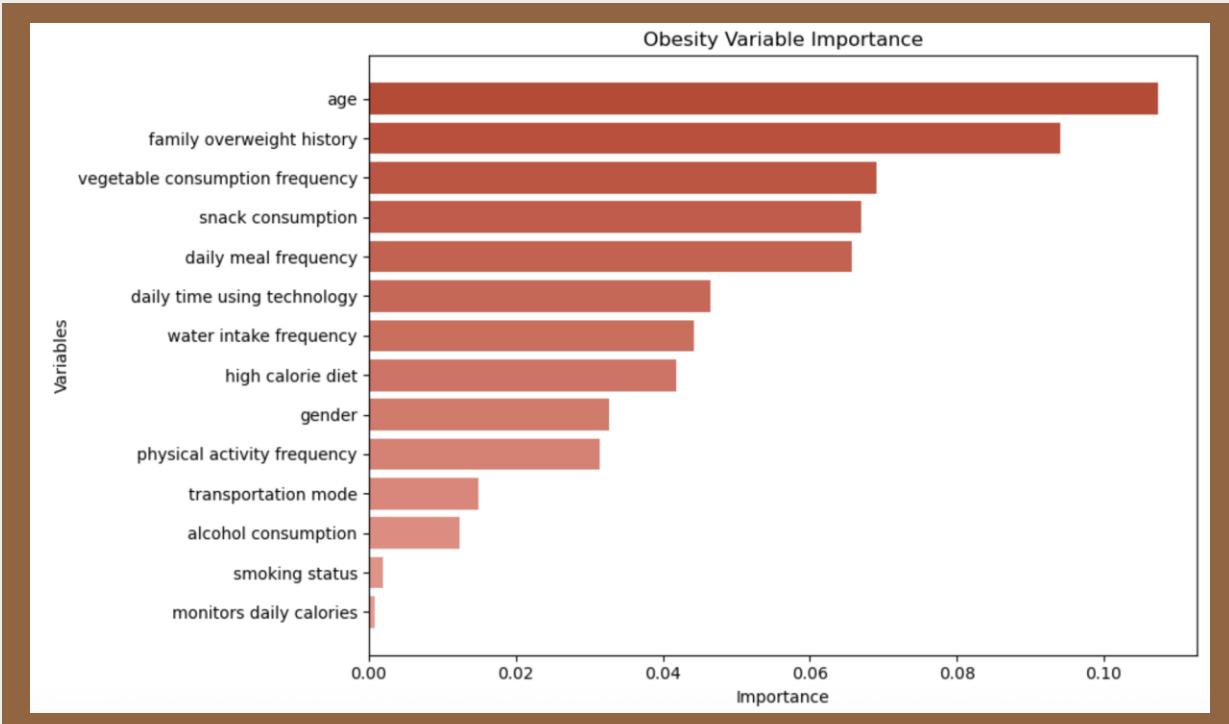
04

# Key Drivers

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# Indirect Factors Contributing to Obesity

- Contrary to popular claims, a high-calorie diet isn't the main driver of obesity.



05

# Model

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# Explanation, Demo & Performance

## What the Model Does:

- Predicts weight status: underweight, normal, overweight, or obese.
- Offers lifestyle tips to reduce obesity risk.

## Model Performance:

**95.6%**  
**Accuracy**



Demo:  
Health Category Checker



06

# Summary

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# Summary

- Around 70% of adults in Mexico are overweight or obese.
- While news reports often focus on high-calorie foods as the main cause, evidence shows that there are stronger contributors.
- This model provides personalized lifestyle guidance, helping individuals understand their own risk factors and identify practical changes they can make.
- By offering personalized feedback, the tool aims to be more effective than general public health messages in supporting healthier behaviors.

# Any Questions?

