



# Don't Know Much About Driver Fatigue

September 19, 2022

Rapid City, SD

# Thanks to Our Sponsor

Mentimeter

CVSA®



Link Engineering Company  
[linkeng.com](http://linkeng.com)

# Check-In & Rate This Session in App



**CVSA<sup>®</sup>**  
**ANNUAL CONFERENCE  
AND EXHIBITION**

SEPTEMBER 18-22, 2022

*Rapid City, South Dakota*



# Contact Info

Rodolfo Giacomani  
Fatigue Management Specialist  
CVSA

[Rodolfo.Giacomani@CVSA.org](mailto:Rodolfo.Giacomani@CVSA.org)  
202-998-1830

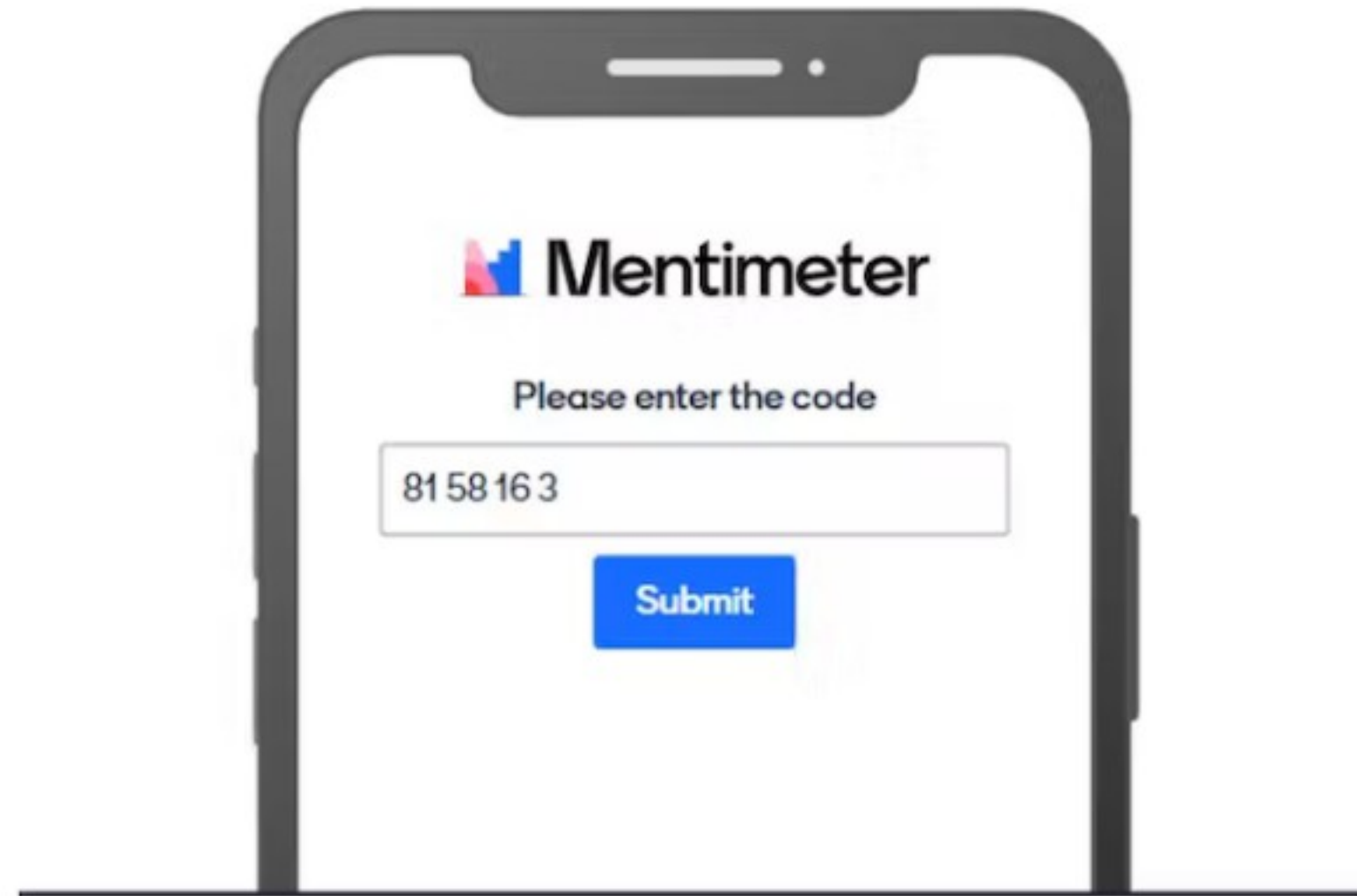
# Disclaimer

- Not a medical professional
- Consult your medical provider before following any lifestyle recommendations or if you feel any discomfort
- You are responsible for any consequences of following any recommendations provided

# Overview

1. A Complicated Problem
2. The Solution
3. The Recipe
4. Online Resources
5. Wellness Basics
6. Strategies
7. What's Next

Go to  
**www.menti.com**

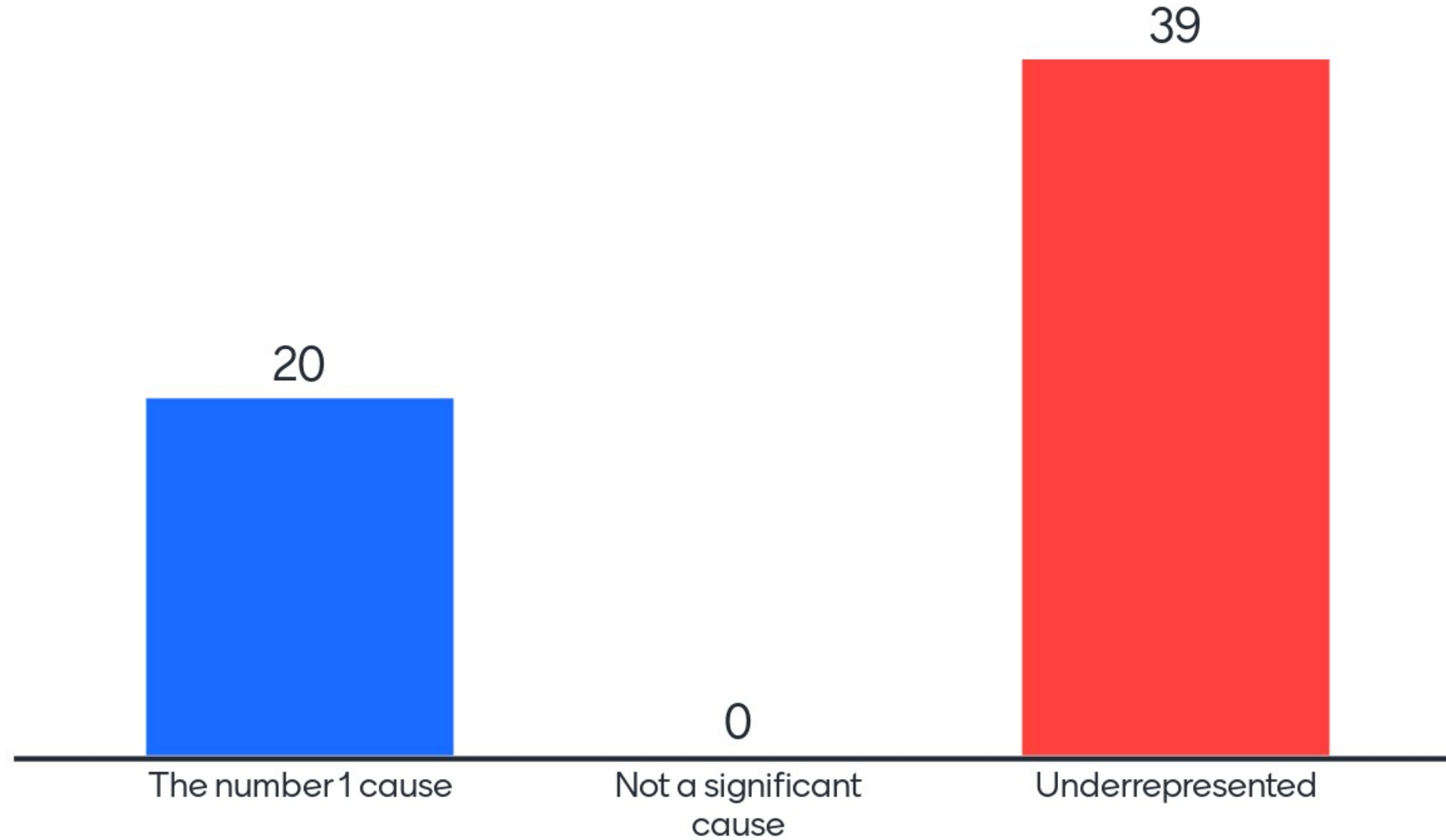


Enter the code  
**81 58 16 3**



Or use QR code

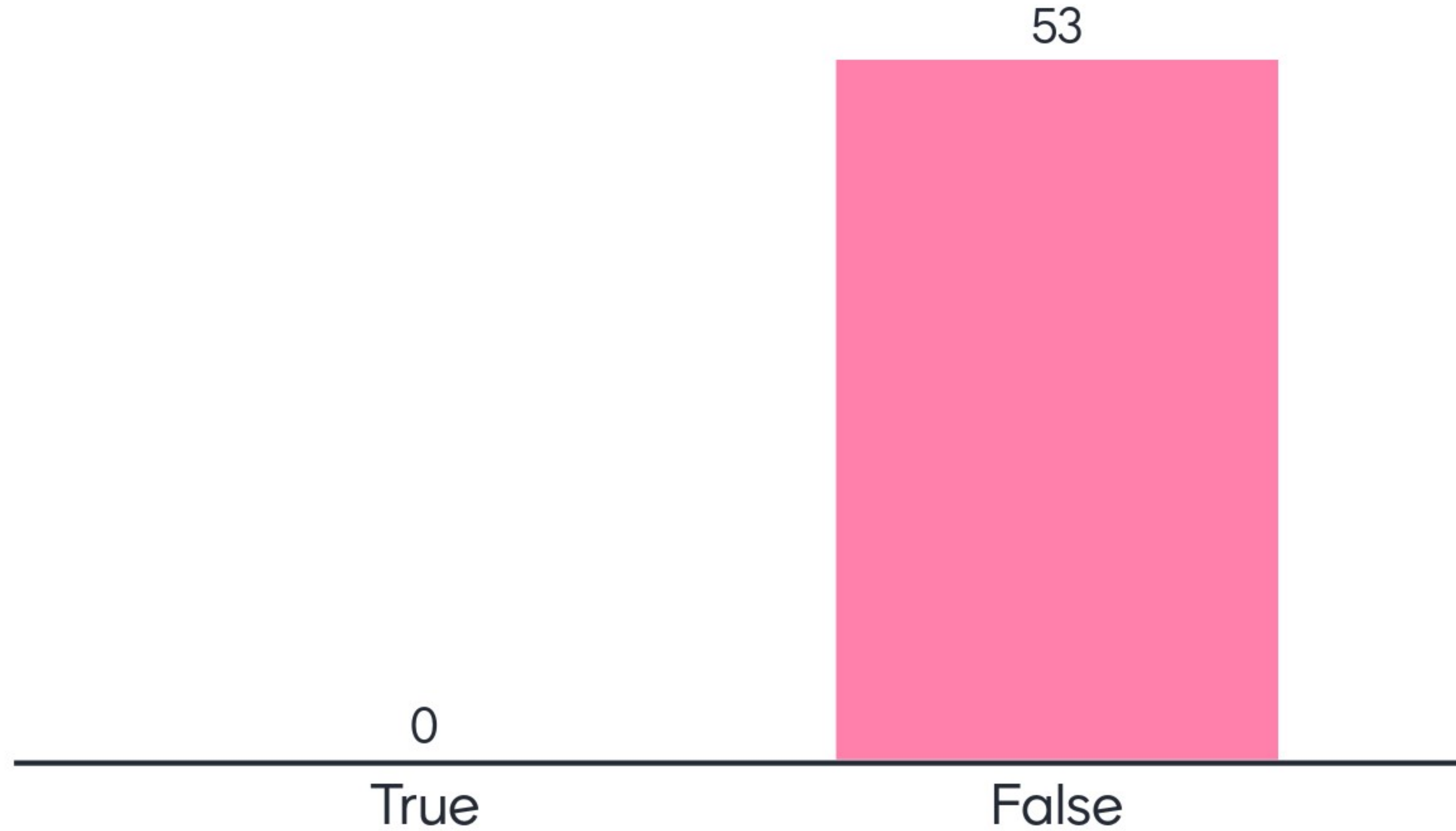
# In crash statistics, driver fatigue is...



## Factors That Affect Fatigue In Heavy Truck Accidents

*“The Safety Board believes that the incidence of driver fatigue is underrepresented in FARS in general and in FARS specifically with regard to truck drivers. Research has suggested that truck driver fatigue is a contributing factor in 30 to 40 percent of all heavy truck accidents.”*

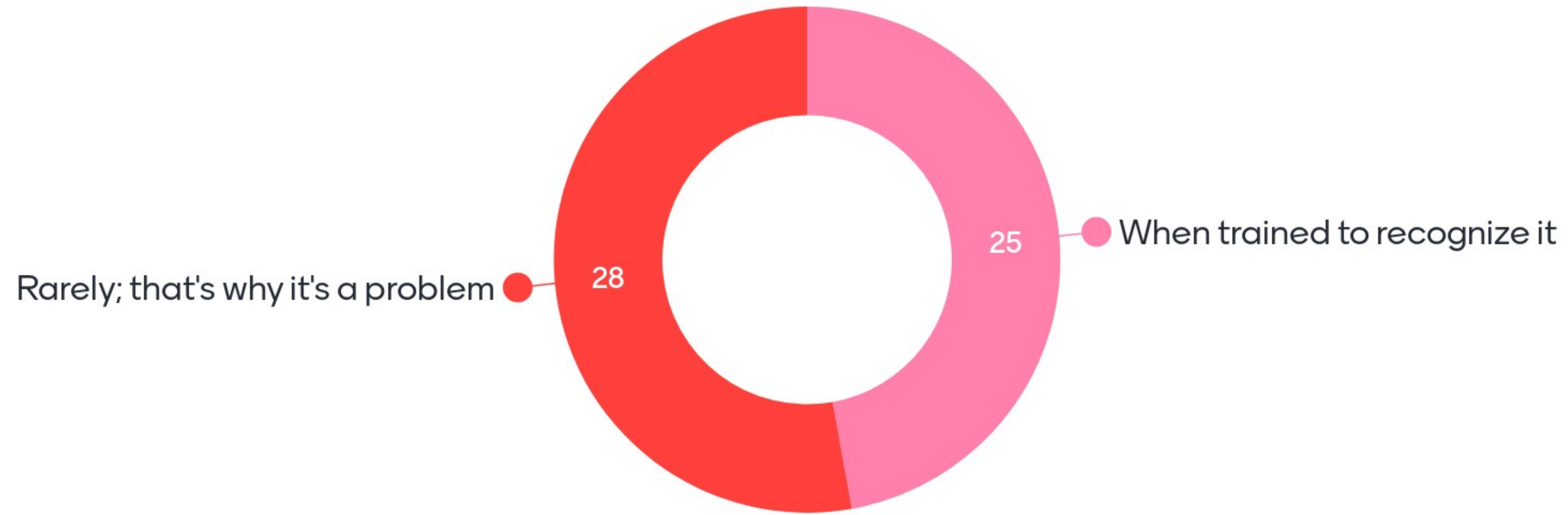
# The only cause of fatigue is insufficient sleep



# Alertness Has Supply & Demand

- Supply Factors
  - Internal, individual susceptibility, circadian rhythm, amount of sleep, time of day, time awake, stimulants, other drugs, health, genes, mood
- Demand Factors
  - Task related: Time on task, task complexity, task monotony
  - Environmental: Road conditions, weather, stress (heat, noise, vibration), vehicle design, social interaction, other stimulation

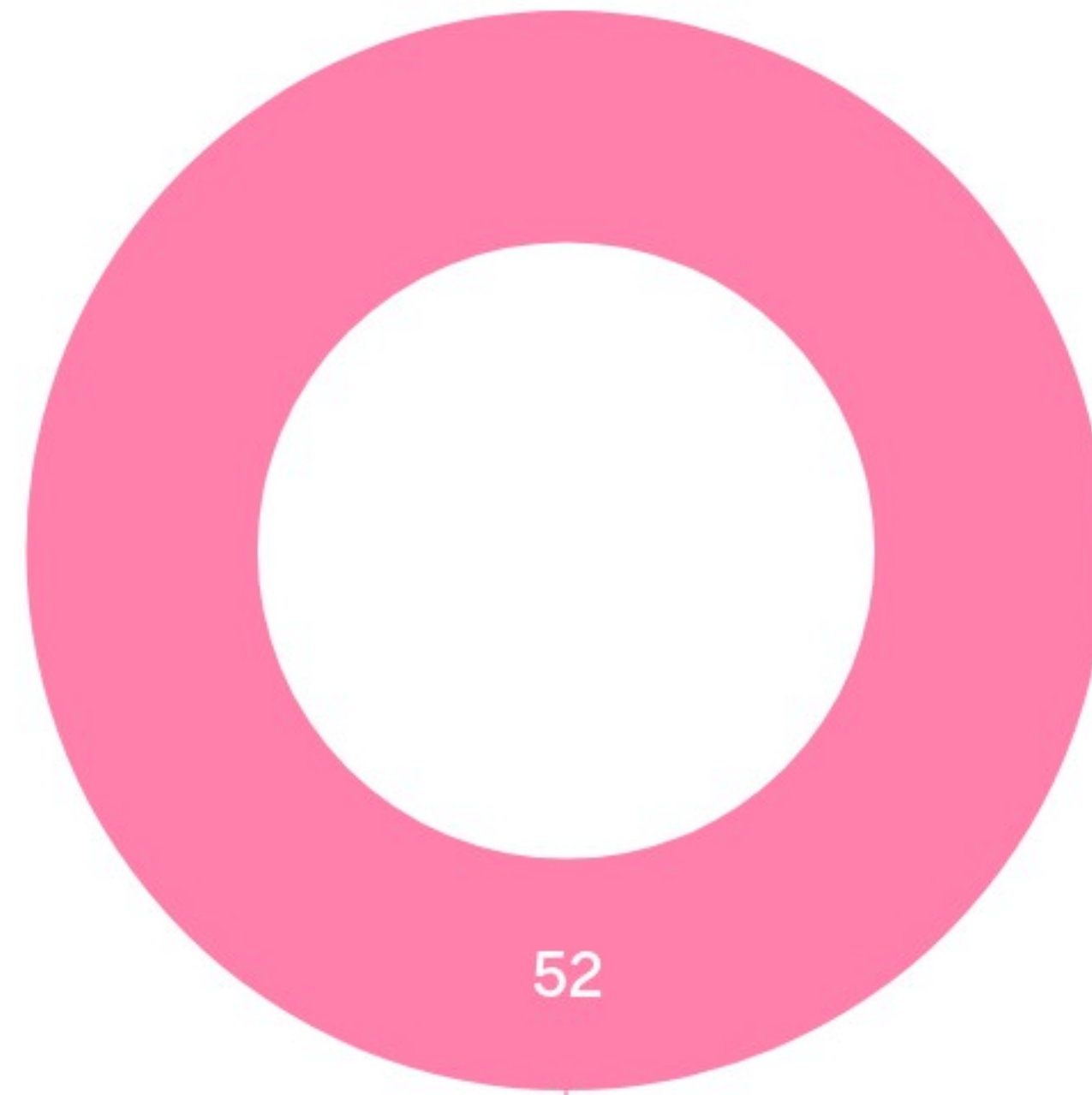
# Drivers can tell they are fatigued...



# Objective Signs of Fatigue

- Eyelid drop or loss of focus
- Yawning
- Wandering, scattered or disjointed thoughts, dreamlike visions
- Head movements, gentle swaying, jerking
- Reduced field-of-view (AKA: tunnel vision, highway hypnosis, white line fever)
- Fidgeting, shifting positions, adjusting windows & HVAC
- Progressive weaving, crossing rumble strip, drift and jerk steering
- Delayed or incorrect responses
- Microsleeps

# Alertness/Fatigue is an On/Off Switch



False

# What does a fatigue crash look like?

Rear end, head on fatal

Rear end crashes

Roadway departure

no skid marks

A rear end crash

Single vehicle

Ran off road

Leaving the roadway

Drifting off of the road.

# What does a fatigue crash look like?

Solo truck crash.

No skid marks on the roadwAy

Single vehicle crash

Drove off road to the right

No skid mark

Gradual road departure

Leave roadway jackknife

Driver falls asleep and drifts out of lane.

Drifting out of correct lane of travel

# What does a fatigue crash look like?

Traffic Signal Violation or off the roadway.

Cross lanes

No breaking during

Leaving road

Headon

Lack of brake use or failure to react

Veer off the Road

Rear end

All

# Fatigue Crash Characteristics

- Usually single-vehicle
- Road departure
- Driver alone
- Often on monotonous roads
- Most in early morning, between 2-7 am
- Usually serious crashes

# Why CMV driving worsens fatigue?

Lack of attention

Unusual hours

Long periods of repetition

Pressure to make delivery window

Complexity of the task

More demanding

Same

80k lbs

Lives are in danger

# Why CMV driving worsens fatigue?

Severity of crash

Long hours

Harder to stop in time

Longer drive times

Log days

Exposure to traveling public

has to be extra alert, drive for others, always "on"

Boring repetitive sedentary task

Added pressure to meet deadlines

# Why CMV driving worsens fatigue?

More stress, more requirements,  
demands from motor carriers and  
regulations

Unusual hour

Long hours

Vibration and sound are constant

Demand

Long hours

Schedule flexibility

Long hours

T

# Why CMV driving worsens fatigue?

Schedules

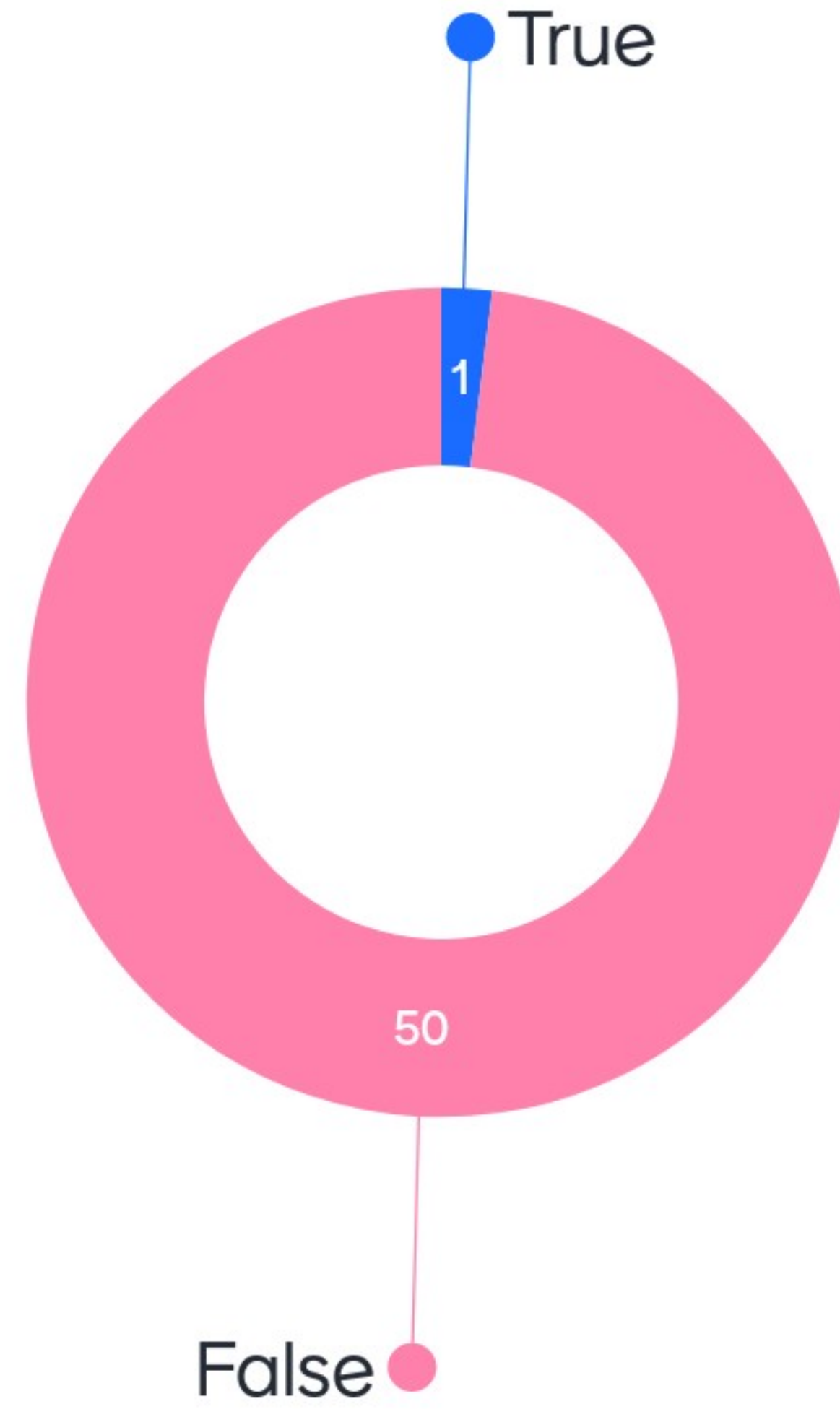
Stress, and brightener awareness

It's work not leisure with delivery pressure

# Why CMV Driving Worsens Fatigue

- Tight schedule to get enough sleep
- Extended work hours + commuting
- Changing work schedules
- Work/sleep periods conflict with circadian rhythm
- Limited time for rest & naps
- Unfamiliar & uncomfortable sleep Locations
- Sleep disruptions
- Difficulty finding nutritious food on the road
- Limited opportunities for exercise
- Personal, work and environmental stressors

# Diver fatigue is fully regulated through hours of service rules...



# The Solution



# nafmp.org

Mentimeter

CVSA®

Français English



About NAFMP ▾

Improve Driver Safety

Training ▾

ROI Calculator

Contact

Webinars

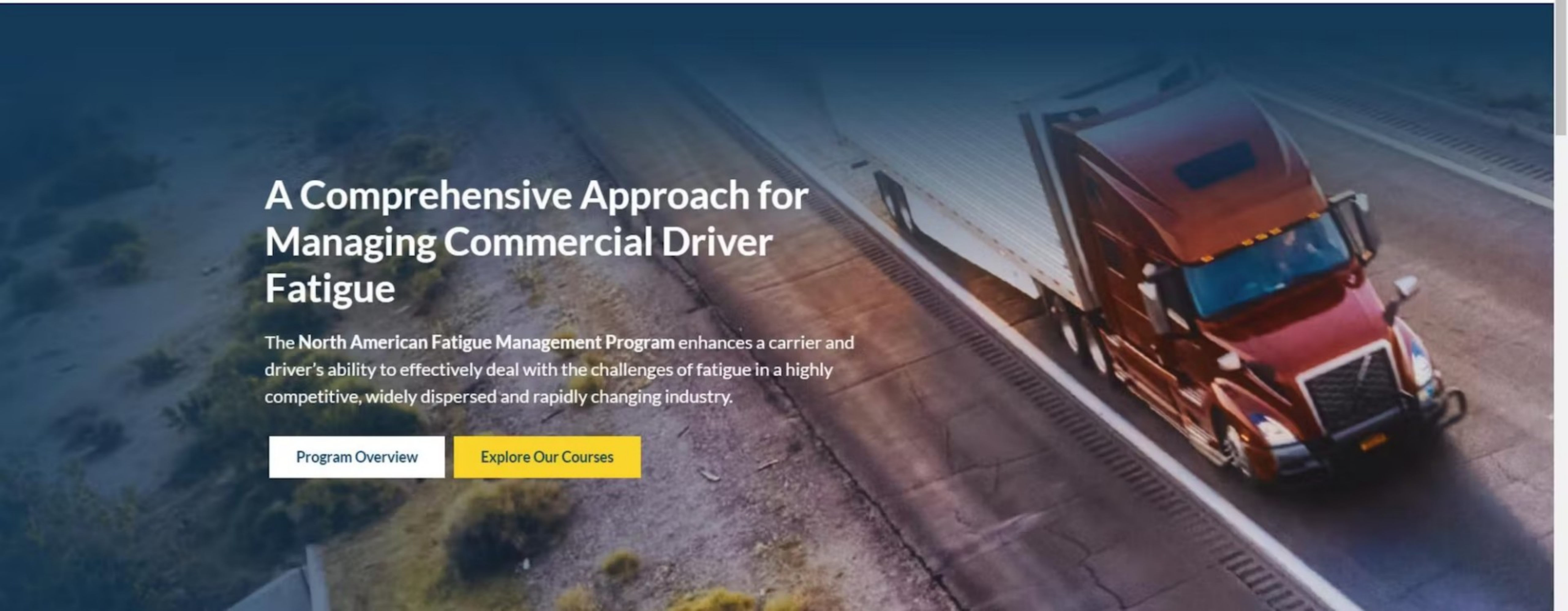


## A Comprehensive Approach for Managing Commercial Driver Fatigue

The **North American Fatigue Management Program** enhances a carrier and driver's ability to effectively deal with the challenges of fatigue in a highly competitive, widely dispersed and rapidly changing industry.

Program Overview

Explore Our Courses



# Implementation Manual



**Guidelines and Materials to Enable  
Motor Carriers to Implement  
a Fatigue Management Program**

## **IMPLEMENTATION MANUAL**

Sponsored by the North American Fatigue Management Program

# eLearning Platform: lms.nafmp.org

Mentimeter



NAFMP

English (en) ▾

You are not logged in. (Log in)



 Fatigue Management Community Forum

No matter your role in managing fatigue, you are welcome to join in the conversation. Questions, comments, and feedback are encouraged. Thank you for your participation. Please select here to log in or create a new free account.



## Available courses

### Module 01



#### FMP Introduction and Overview

**Target Audience:** Carrier executives and other managers

**Estimated Duration:** 45 min

### Module 02

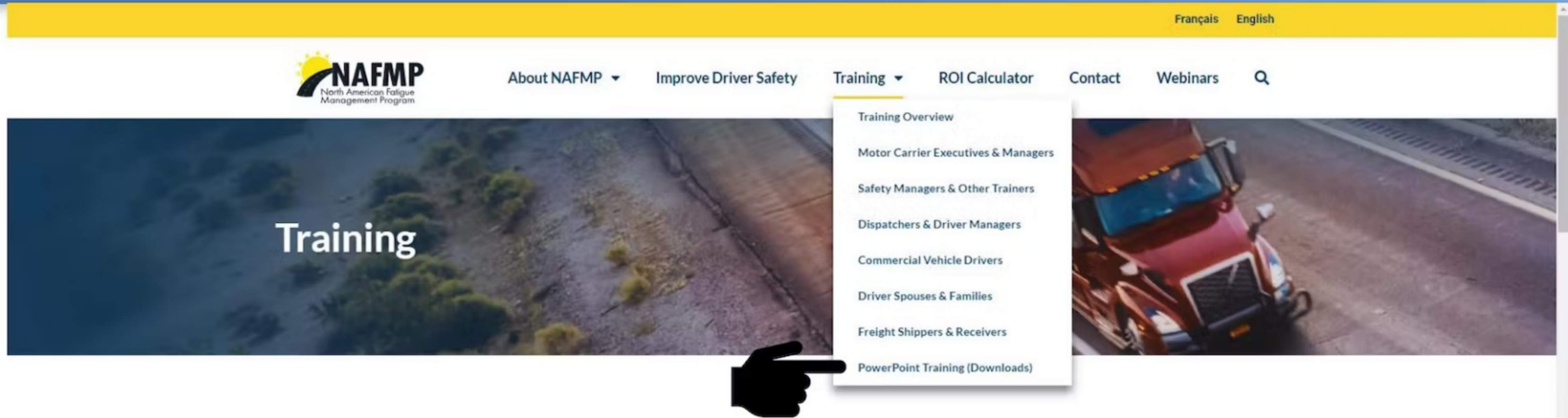


#### Safety Culture and Management Practices

**Target Audience:** Carrier executives and other managers

**Estimated Duration:** 1.5 hours

# PowerPoint Presentations



## PowerPoint Training (Downloads)

NAFMP online training is a comprehensive, interactive experience. We encourage you to participate in the program via our free and [self-paced e-learning system](#). Through the system, you'll have access to periodic check-ins, quizzes and scores. Motor carriers can also encourage their drivers and other personnel to register and complete the appropriate modules through the online system.

### PowerPoints with Audio Narration

NAFMP Training can also be downloaded in PowerPoint format. This option allows you to view and hear the training but does not test your knowledge nor provide

Access the Complete  
Training Program Online →

How to get started (PDF)

### Improve Driver Safety

Reduce fatigue-related risks, reduce crashes, improve alertness and promote job satisfaction.

[Learn more](#)

# ROI Calculator



## ROI Calculator

### Return on Investment (ROI) Calculator

Estimate the monetary benefits of implementing the North American Fatigue Management Program either in its entirety or in select components in a customized program, i.e., fatigue management training, sleep disorder screening and treatment, technology deployment, and scheduling tools.

Click on the links below to download the ROI Calculator and User Guide:

Calculator User Guide (PDF)

Calculator Download (Excel Spreadsheet)

Access the Complete Training Program Online →

? How to get started (PDF)

#### Improve Driver Safety

Reduce fatigue-related risks, reduce crashes, improve alertness and promote job satisfaction.

Learn more

# Webinars

Mentimeter



Français English



About NAFMP ▾

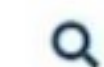
Improve Driver Safety

Training ▾

ROI Calculator

Contact

**Webinars**



## Webinars

### Webinars and Courses

Register for upcoming live NAFMP webinars and courses or check out previous recordings below.

#### Upcoming

**Information Session – Don't Know Much About Driver Fatigue**

Access the Complete  
Training Program Online →

How to get started (PDF)

**Improve Driver Safety**

# Benefits

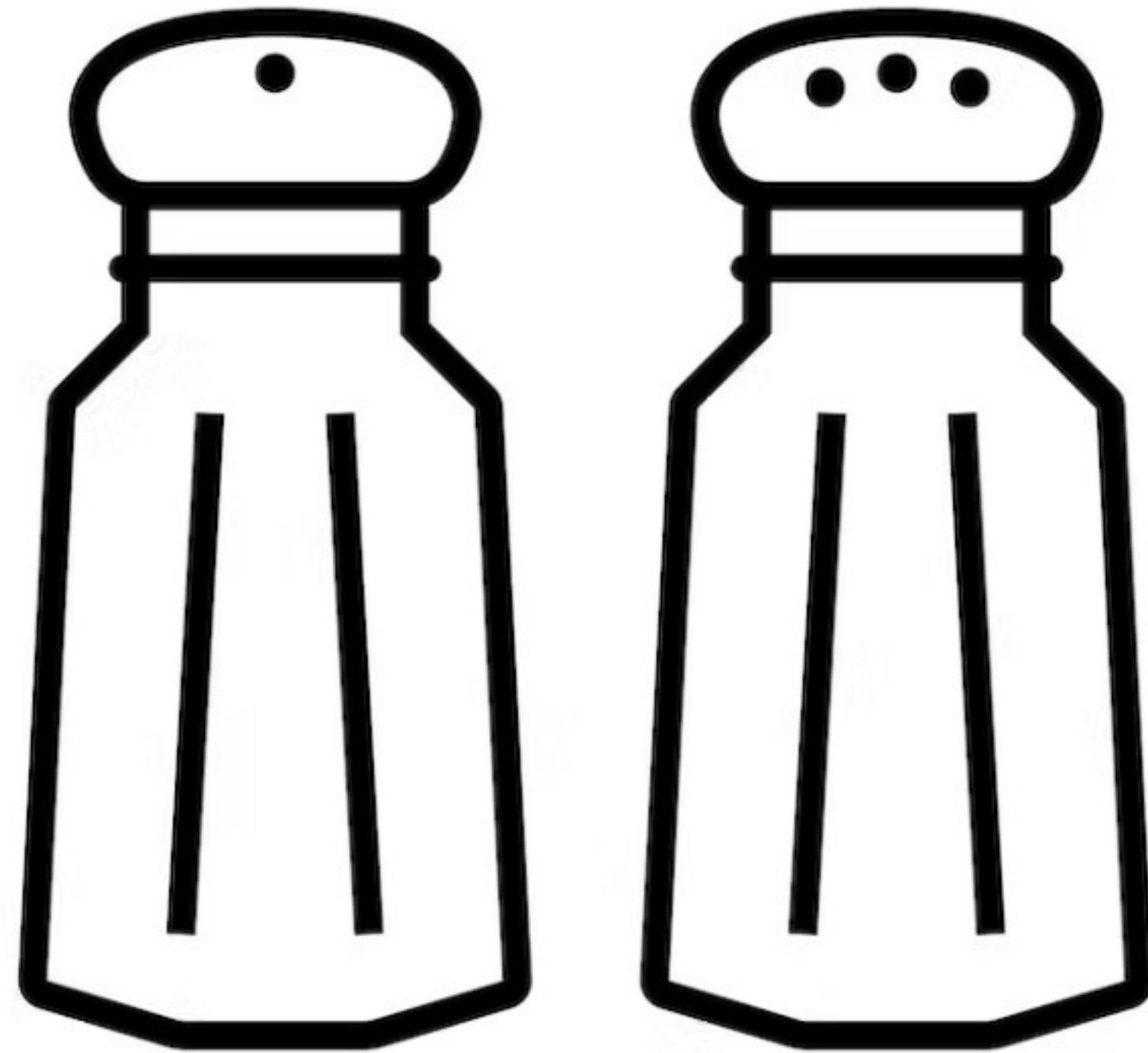
- Lower Fatigue Related Crashes
- Lower Legal Liability Exposure
- Cost Reduction
  - Driver retention
  - Medical costs
  - Maintenance
- Labor force
  - Safer
  - More productive
  - Healthier & happier

## Fatigue Management Program

# Kitchen



# 1. Salt & Pepper



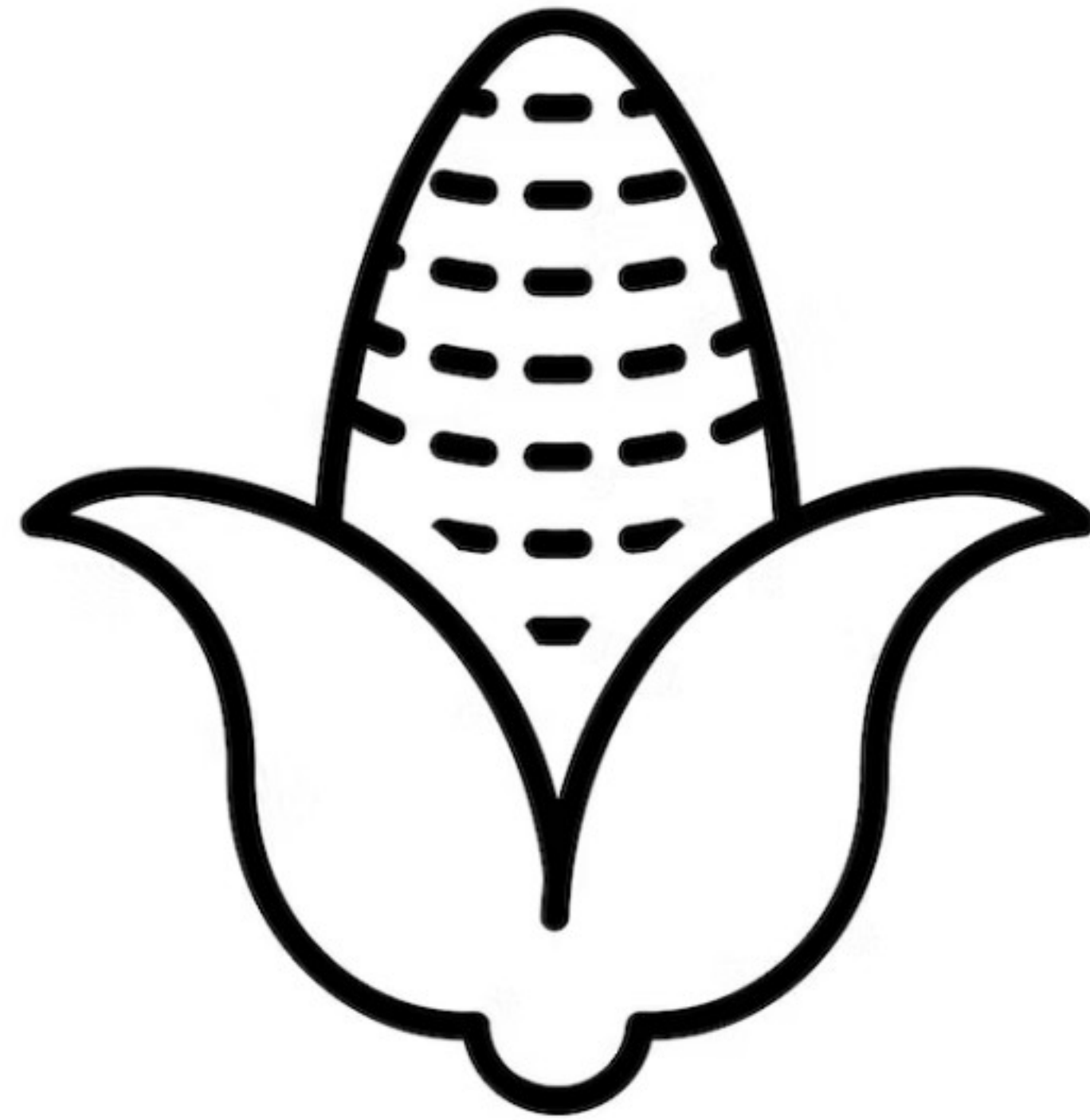
## 2. Heat



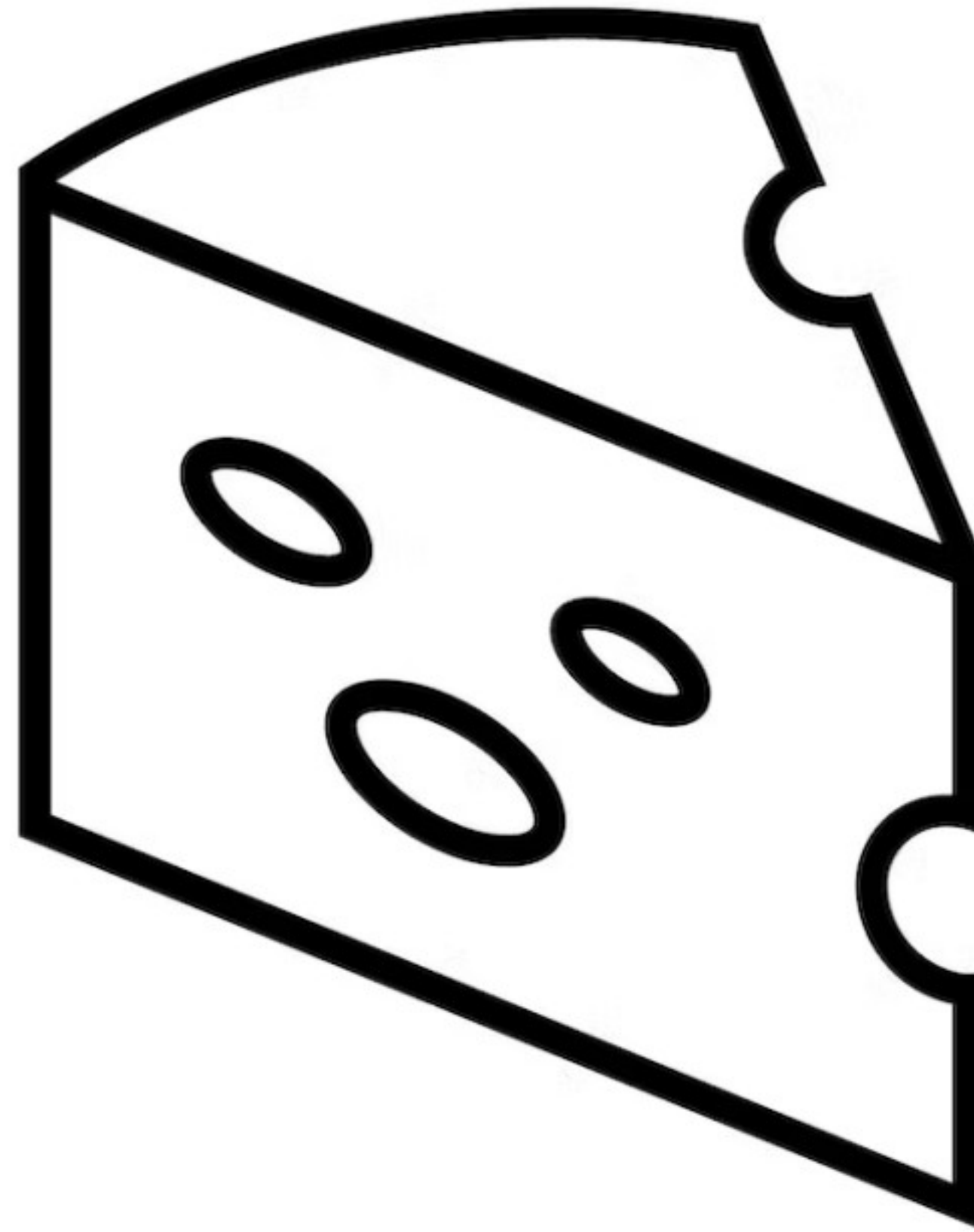
# 3. Drink



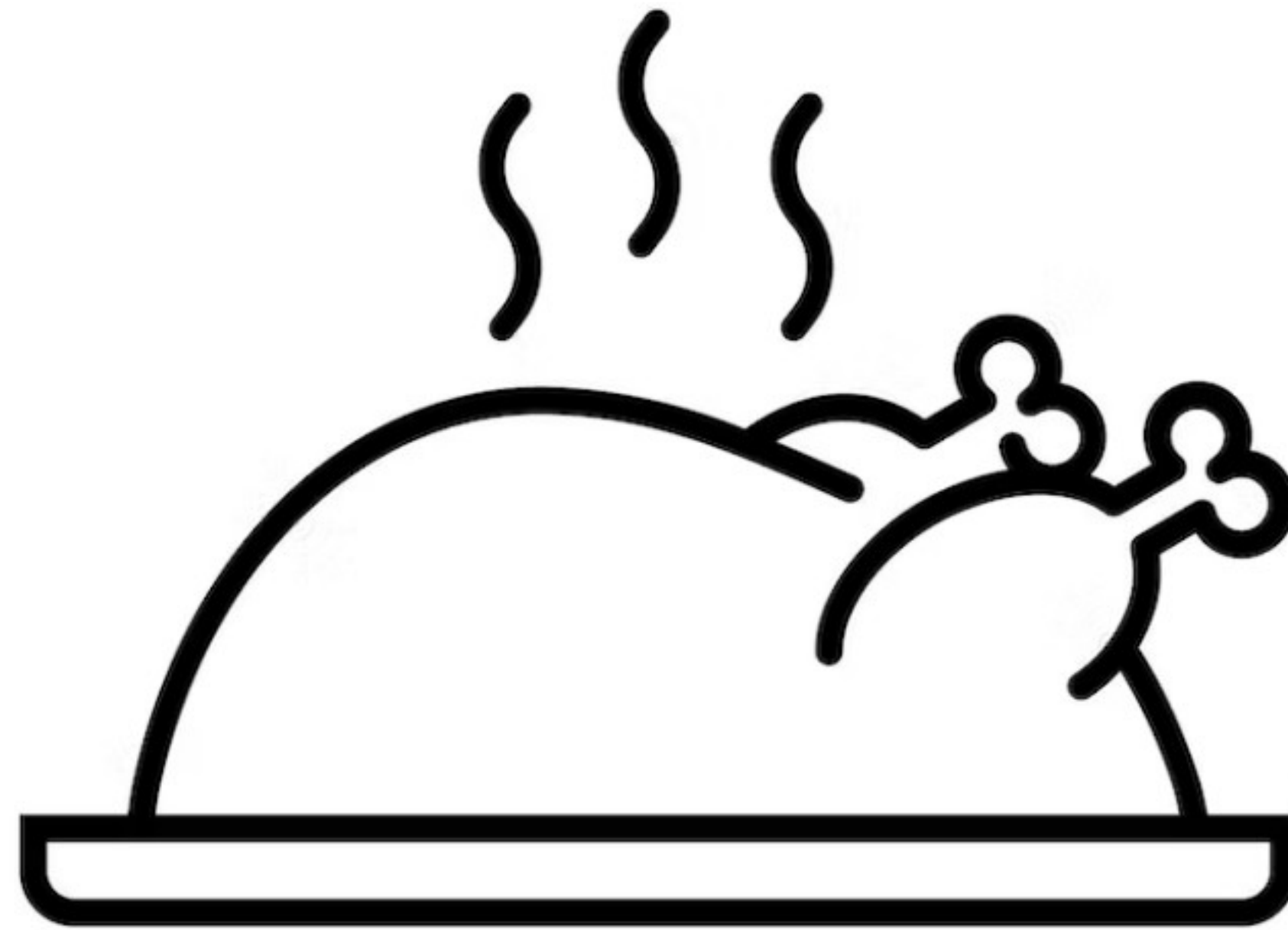
# 4. Carbs



# 5. Fats



# 6. Protein



# Write one of the six FMP ingredients?



# Fatigue Management Program (FMP)

1. Safety Culture
2. Fatigue Risk Management System
3. Sleep Disorder Screening & Treatment Program
4. Scheduling Practices
5. Fatigue Management Technologies
6. Education & Training

# Steps to Prepare Recipe

## Implementation Manual Chapter 3

# What are the two types of sleep?

non-rem

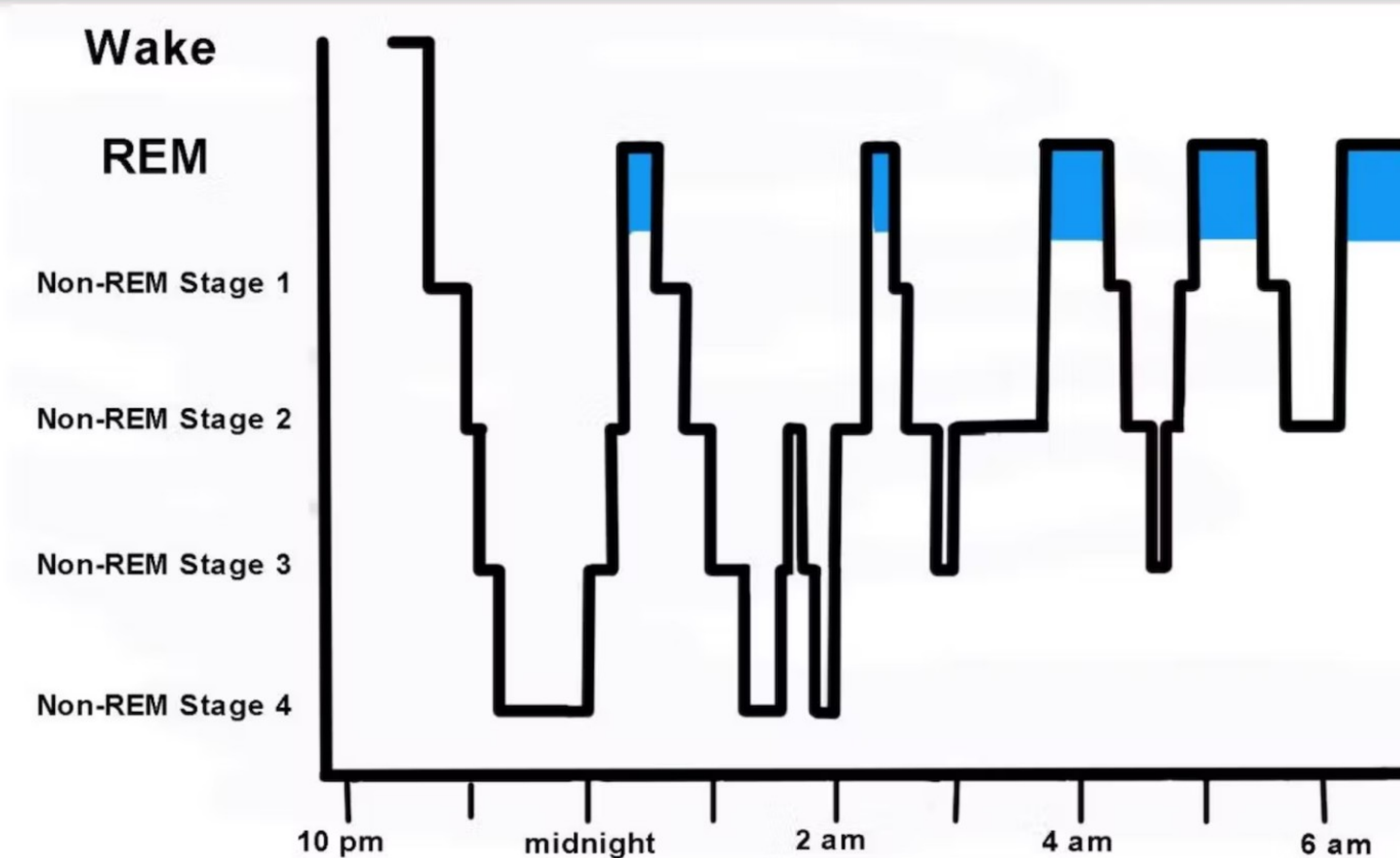
deep rem light  
a b tem

# How many sleep cycles do we need?

6 9 3 2  
4 1 8 25

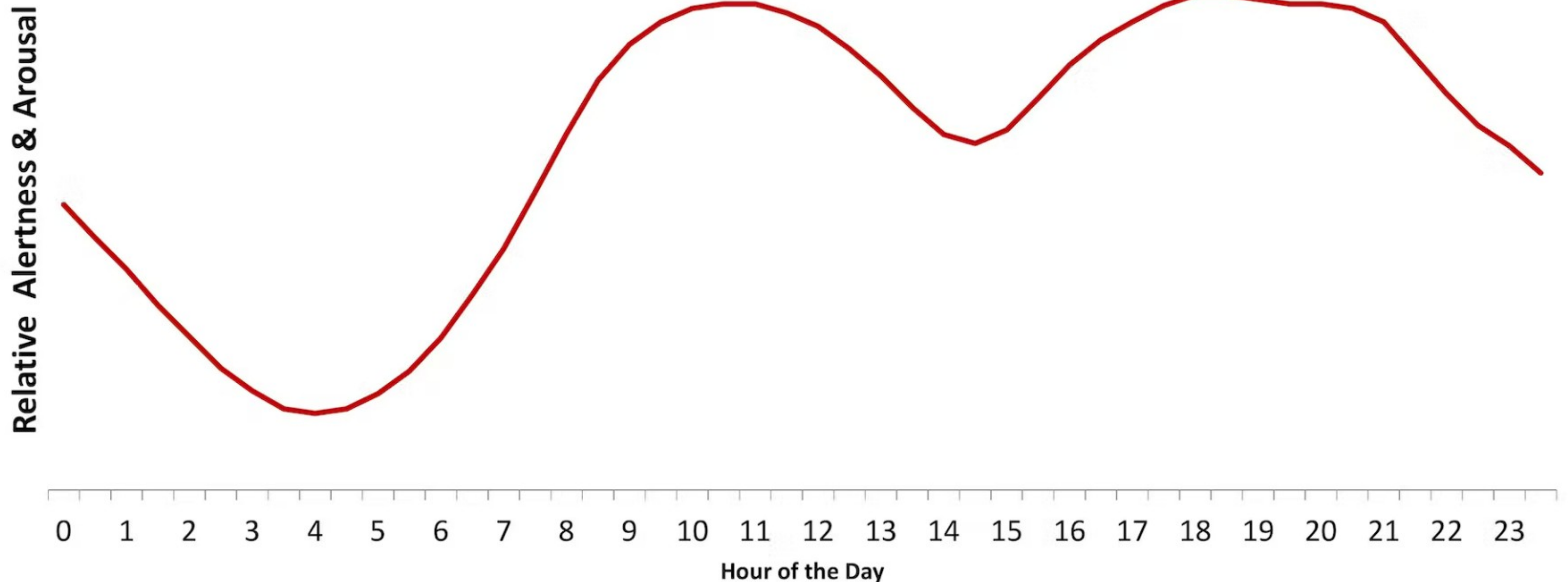
all of them

# Sleep Types, Stages and Cycles

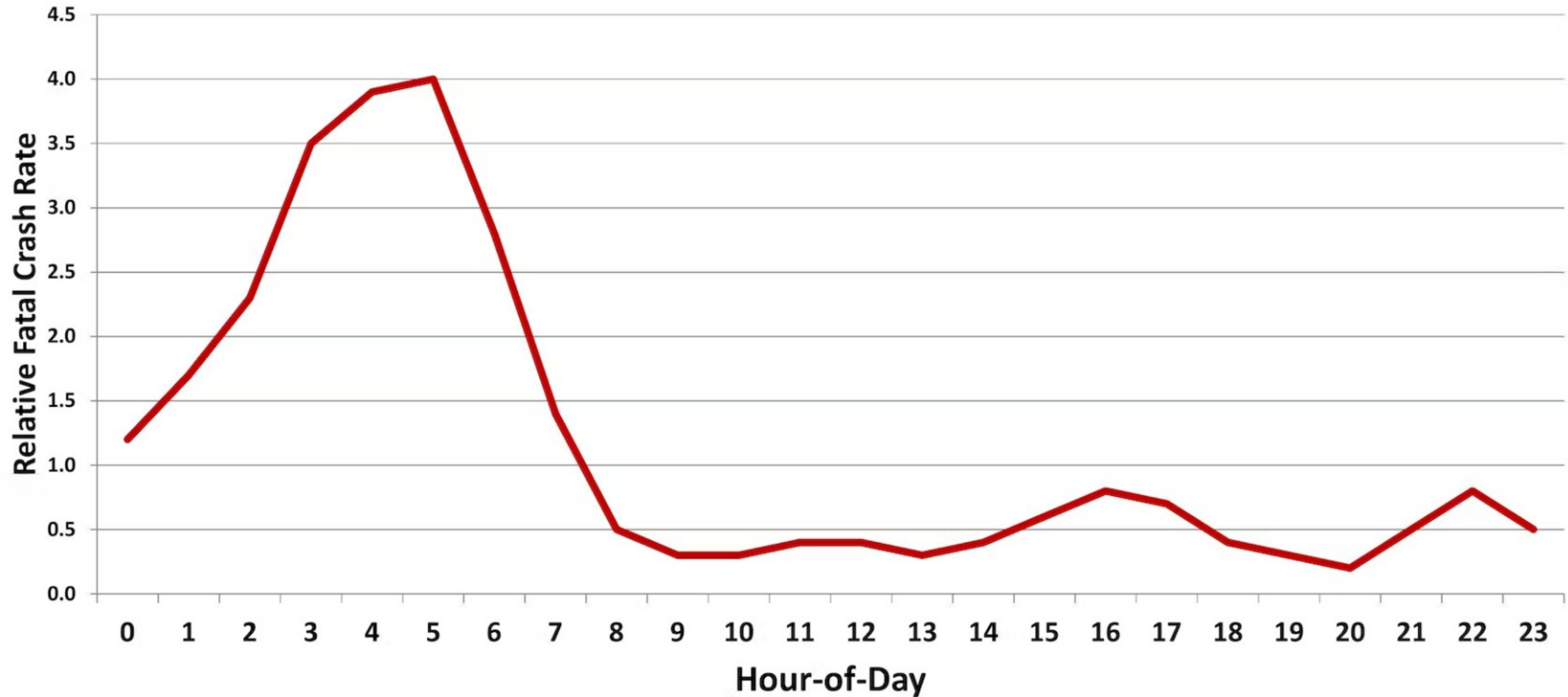


# Alertness Circadian Rhythm

Circadian Rhythm of Alertness



# Fatigue-Related Fatal Crash Rate by Time



Which hormone is responsible for the sleep pressure or sleep drive?

dopamine

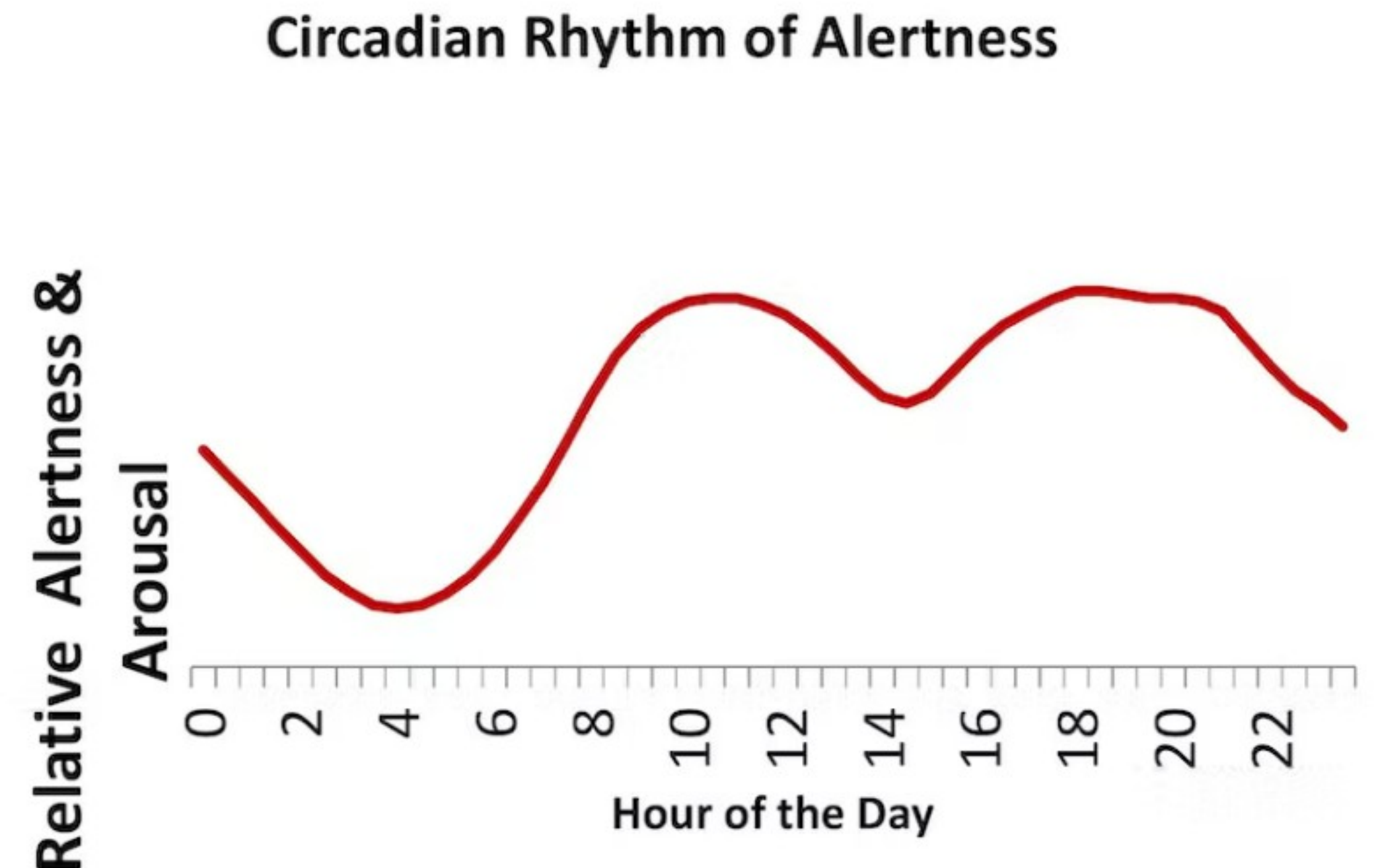
serotonin

cortisol

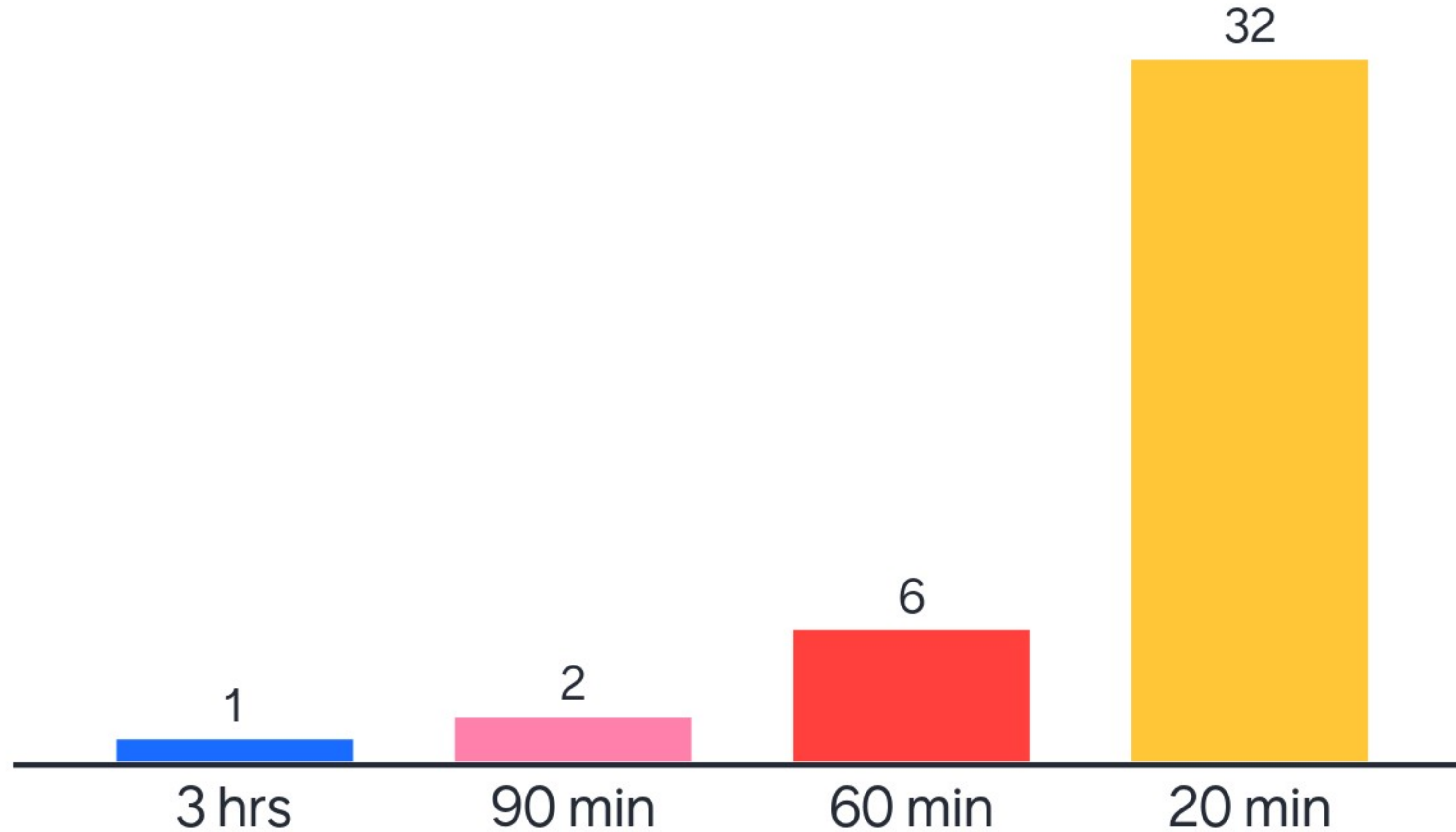
α melatonin

# Sleep Hygiene Factors

- Quantity: last, previous, naps
- Time-of-day: best sleep during circadian valleys
- Light & Dark
- Temperature
- Noise
- Exercise
- Nicotine, Caffeine, Alcohol, Other Drugs
- Medicines
- Meals & fluids
- Bed comfort
- Lying in bed awake
- Anything else that might awaken you

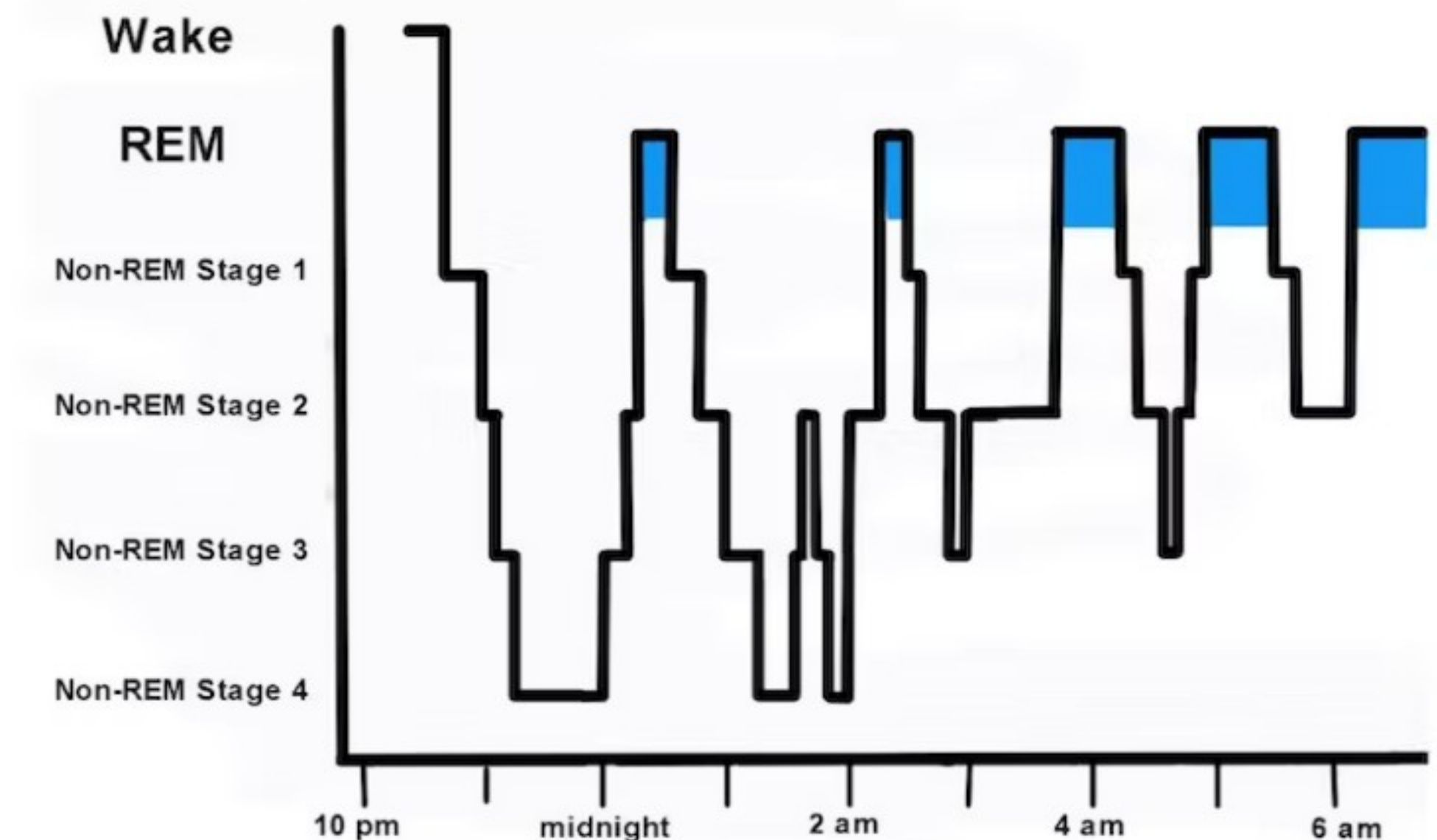


# What's the optimal duration of a nap?

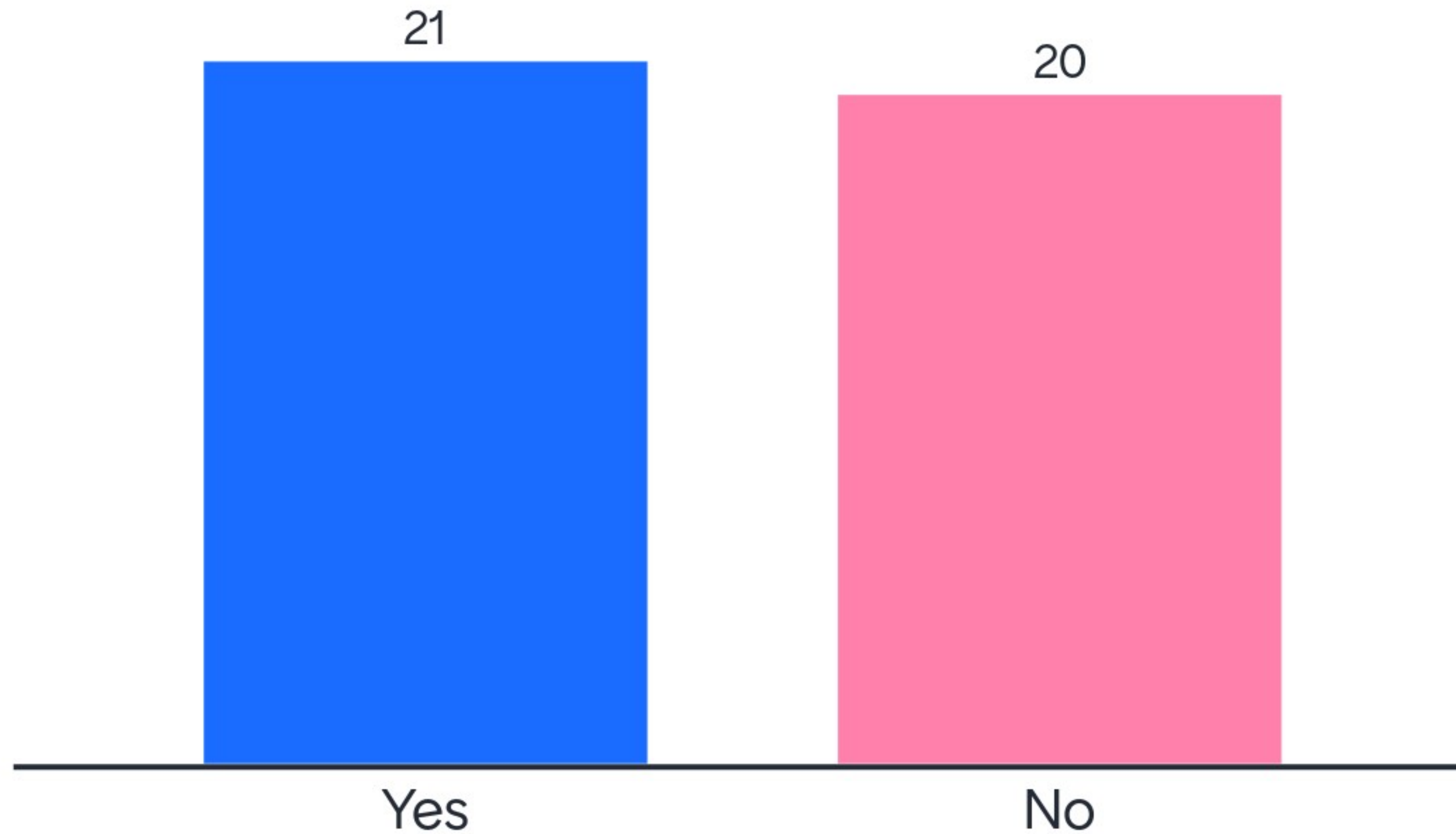


# Naps & Sleep Inertia

- Naps
  - Best fatigue countermeasure
  - Improves alertness & performance
  - Planned naps reduced subsequent dozing by 50% & errors by 34%
  - Optimal duration 20 min / 90 min
  - Longer naps may delay onset of next main sleep
- Sleep inertia
  - Grogginess upon awakening
  - May last 20 minutes or more
  - May affect driving
  - Caffeine may help



# Do you fall asleep while watching a movie or while stopped at a traffic stop?



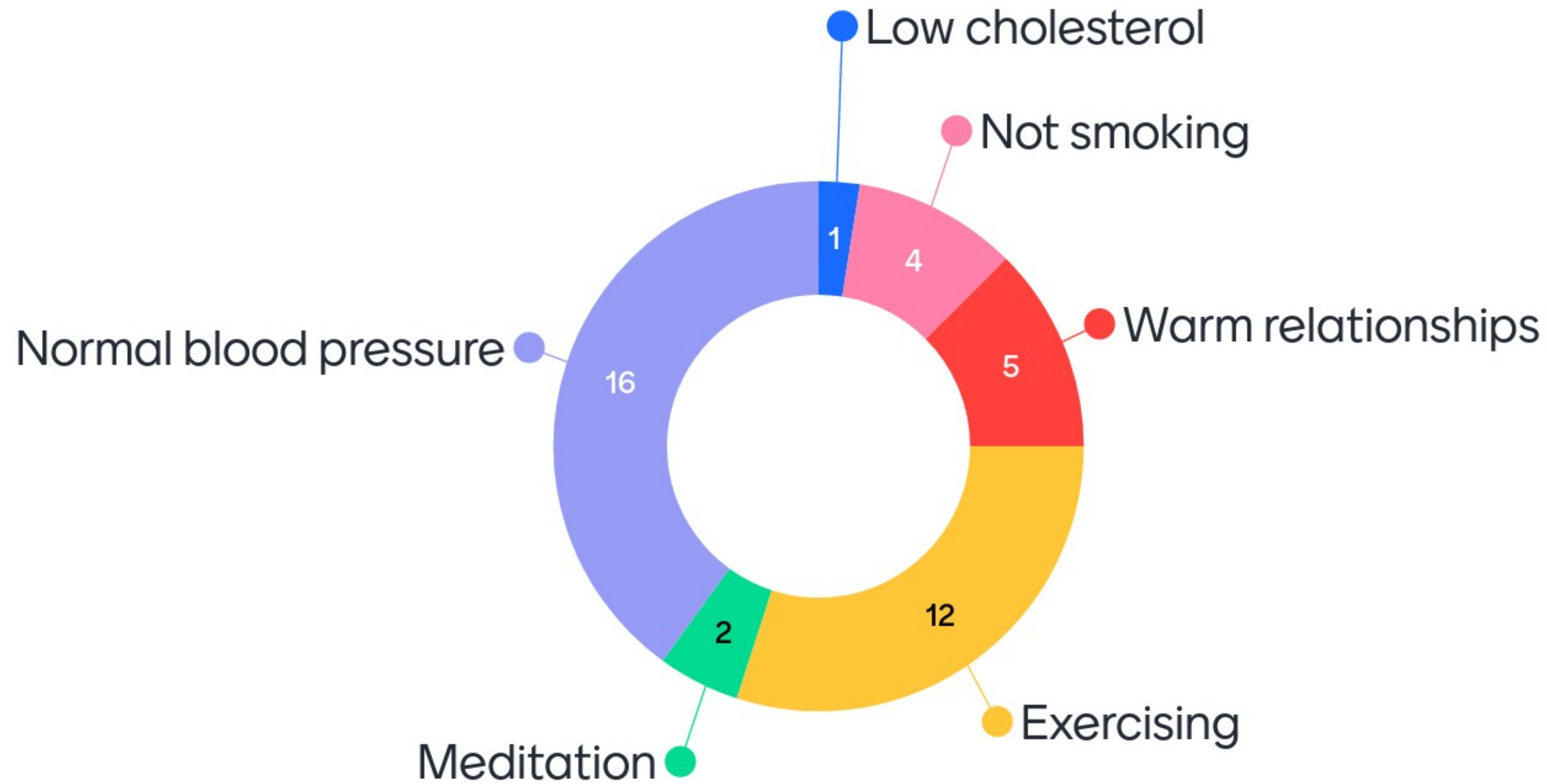
# How to Payback a Sleep Debt?

- Sleep debt
- Full night sleep
- May require several nights of full sleep
- Avoid deprivation
- Sleep until you wake up
- Make extra deposits on the weekend

# Sleep Debt Effects on Health

- Increased appetite
- Obesity
- Increased diabetes risk
- Reduced immune system functioning
- Increased blood pressure
- Increased risk of heart disease
- Gastrointestinal problems
- Irritability
- Infertility
- Worsens psychiatric conditions
  - Alzheimer's disease, anxiety, depression, bipolar disorder, suicide, stroke, chronic pain
- Decreased quality of life
- Increased sick days
- Disrupts relationships

# What is the single most important predictor of health and longevity?



# Relationships Affect Wellness

- Stress with isolation from family & friends
- Finding and sustaining network of family, friends & coworkers
- Keep in touch, communicate
- Value and foster each relationship
- Do fun things together
- Be positive
- Show support
- Have family take Module 4 (Family Ed)

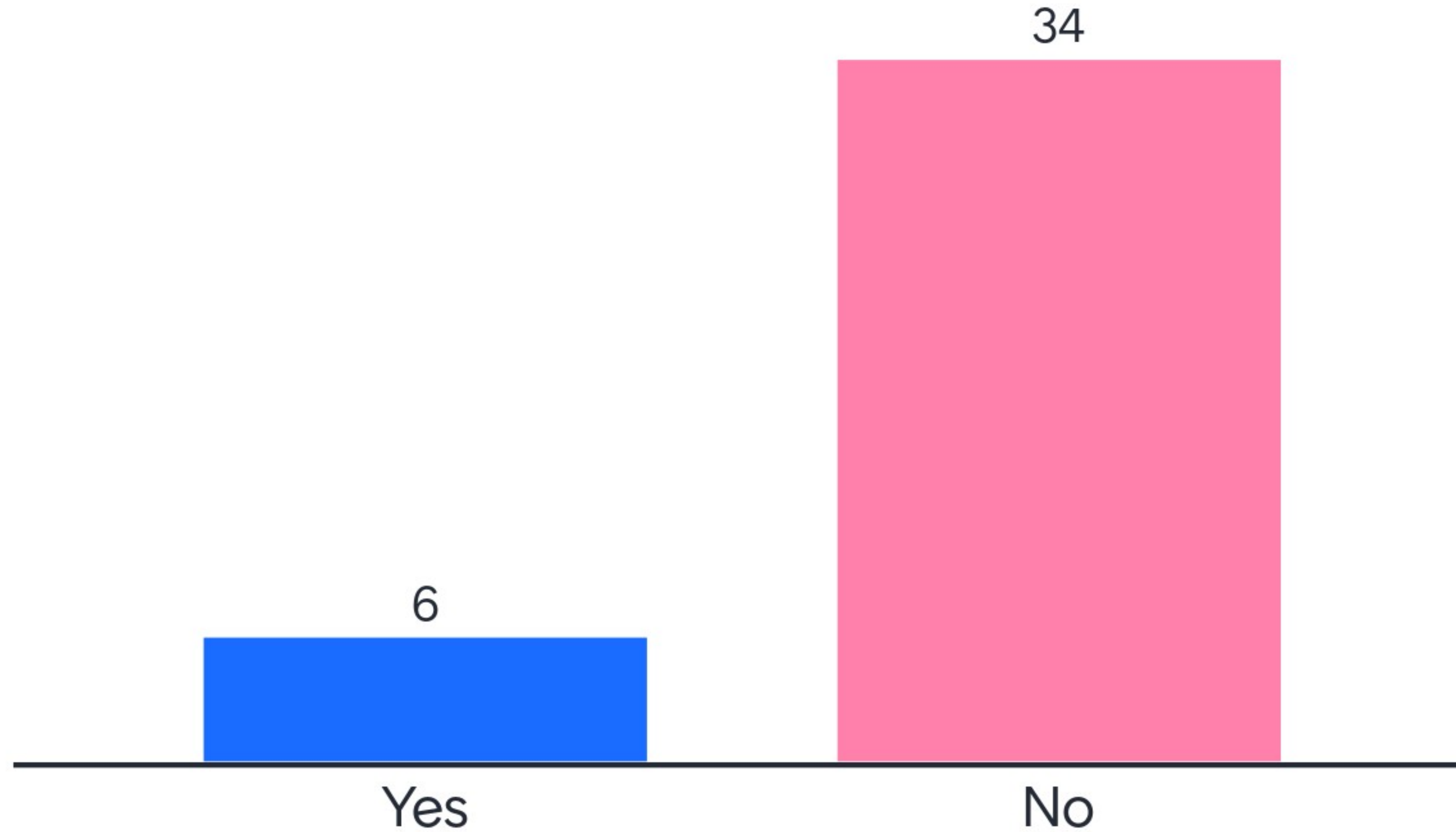
# Stress Effects

- Headaches
- Sleep disturbances
- Difficulty concentrating
- Short temper
- Upset stomach
- Job dissatisfaction
- Low morale

# Positive Behaviors

- Positive outlook and behaviors
- Balance between work and personal life
- Pursue personal interests
- Support network
- Try to improve job environment
- Get serious about relaxing
  - Relaxation breathing
  - Short walks
  - Meditation
  - Reading
  - Find method that works best for you

# The purpose of diets is to loose weight



# Weight Loss Is the Wrong Goal

## Where Does Body Weight Come From

- Liquids, Bones, Muscles, Fat
- Weight loss is regained in 1-5 years
- May lack essential nutrients and may be harmful
- May take pleasure out of eating
- May lead to eating disorders
- Snake oil is medical quackery
- Goal is to stay healthy, enjoy food and share it with others

# Obesity vs Metabolic Syndrome

- U.S. Adults (240 million)
  - 70% Non-Obese (168 million)
    - 60% Healthy (101 million)
    - 40% Metabolic Syndrome (TOFI) (67 million)
  - 30% Obese (72 million)
    - 20% Healthy (14 million)
    - 80% Metabolic Syndrome (58 million)
  - Total healthy: 115 million
  - Total Metabolic Syndrome: 125 million
- Metabolic Syndrome
  - Non-alcoholic fatty liver disease
  - Diabetes
  - Cardiovascular disease
  - Hypertension
  - Lipid abnormalities
  - Polycystic ovarian cancer
  - Dementia

- Essential Macronutrients
  - Carbs with Fiber (veggies, fruits, whole grains)
  - Fats except artificial trans fats (fatty fish, nuts, seeds, avocado, milk products)
  - Proteins (fish, seafood, chicken, beef, pork)
  - Water
- Essential Micronutrients
  - Vitamins
  - Minerals
- Nutritious food
  - No ingredients list
  - No nutrition label

# Malnutrition

- Ultra processed food
  - Lack of fiber
  - Excess sugar, salt, oils, fats and other additives
  - Engineered to taste good
  - Cheap & convenient
  - Aggressively marketed
  - Addictive
- Liquid candy
  - Soda
  - Juice
  - Any caloric drink
- Toxic to the liver
  - Excess sugar
  - Excess protein
  - Drugs

# What food choice would you recommend to drivers while on the road?

Fruit

Fruit

Chicken salad

veggies

Beans

Nuts

Nuts

Chicken, veggies, water

mixed nuts

# What food choice would you recommend to drivers while on the road?

Veggies

Balanced protein/carbs

Veggies: snacks

Tuna

Salads

Salad

Nuts and fruit

Vegetable

Nuts

# What food choice would you recommend to drivers while on the road?

Veggies

Nuts

Fruit, nuts

Salad

Pack smart meals don't snack

Tomatoes

Almonds and walnuts

Cut up veggies in vinegar --easy to snack on and tasty  
Bagged and raw nuts

Carrots

# What food choice would you recommend to drivers while on the road?

PBJ

Almonds and fruit

Water

Beef jerky

Avoid fast food

Balanced plate of carbs, proteins, and fats

Veggies

Water water water

High protein grubbs

# What food choice would you recommend to drivers while on the road?

Avacado

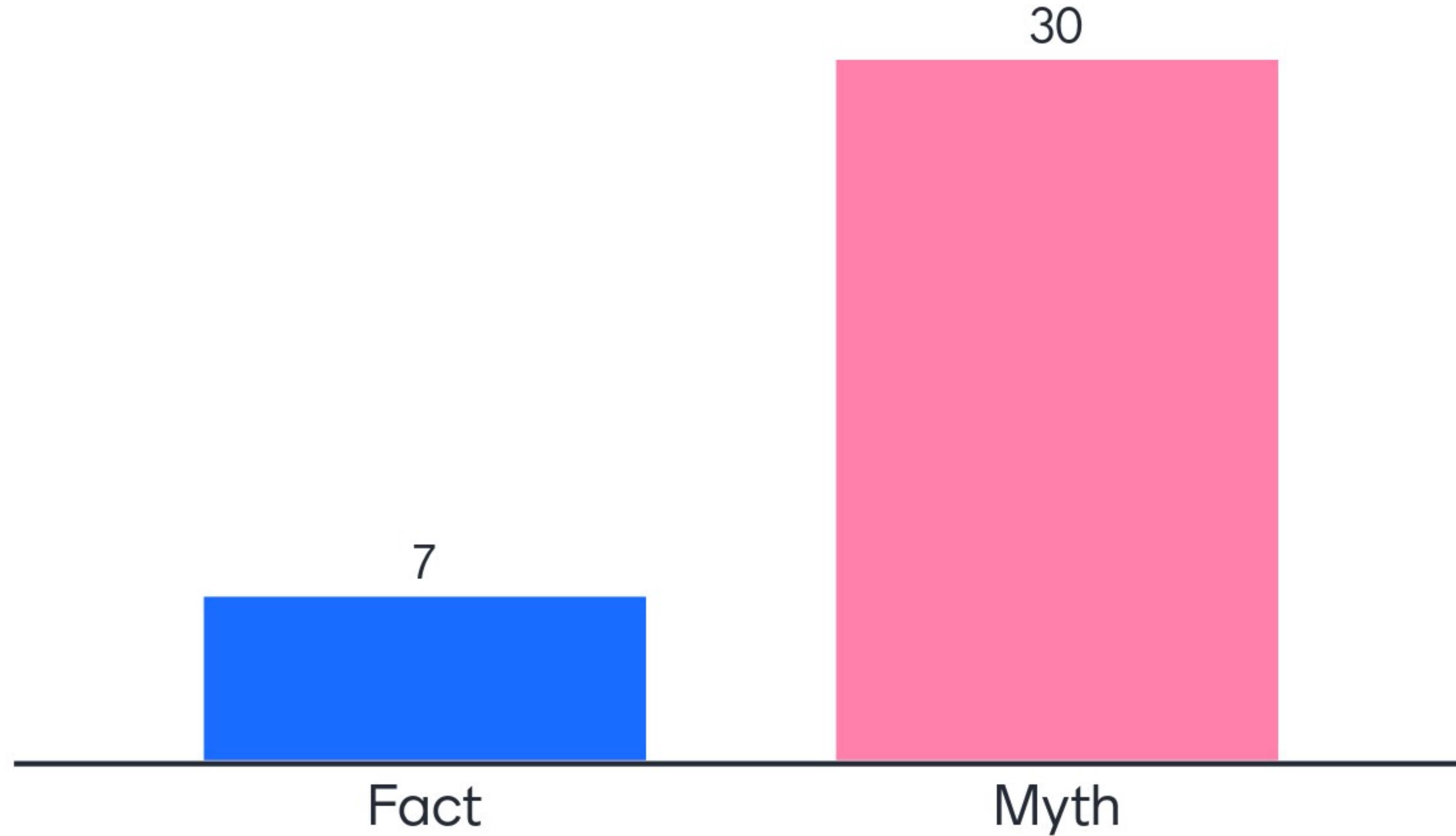
Fruit

Nuts

# Sample Food Choices on the Road

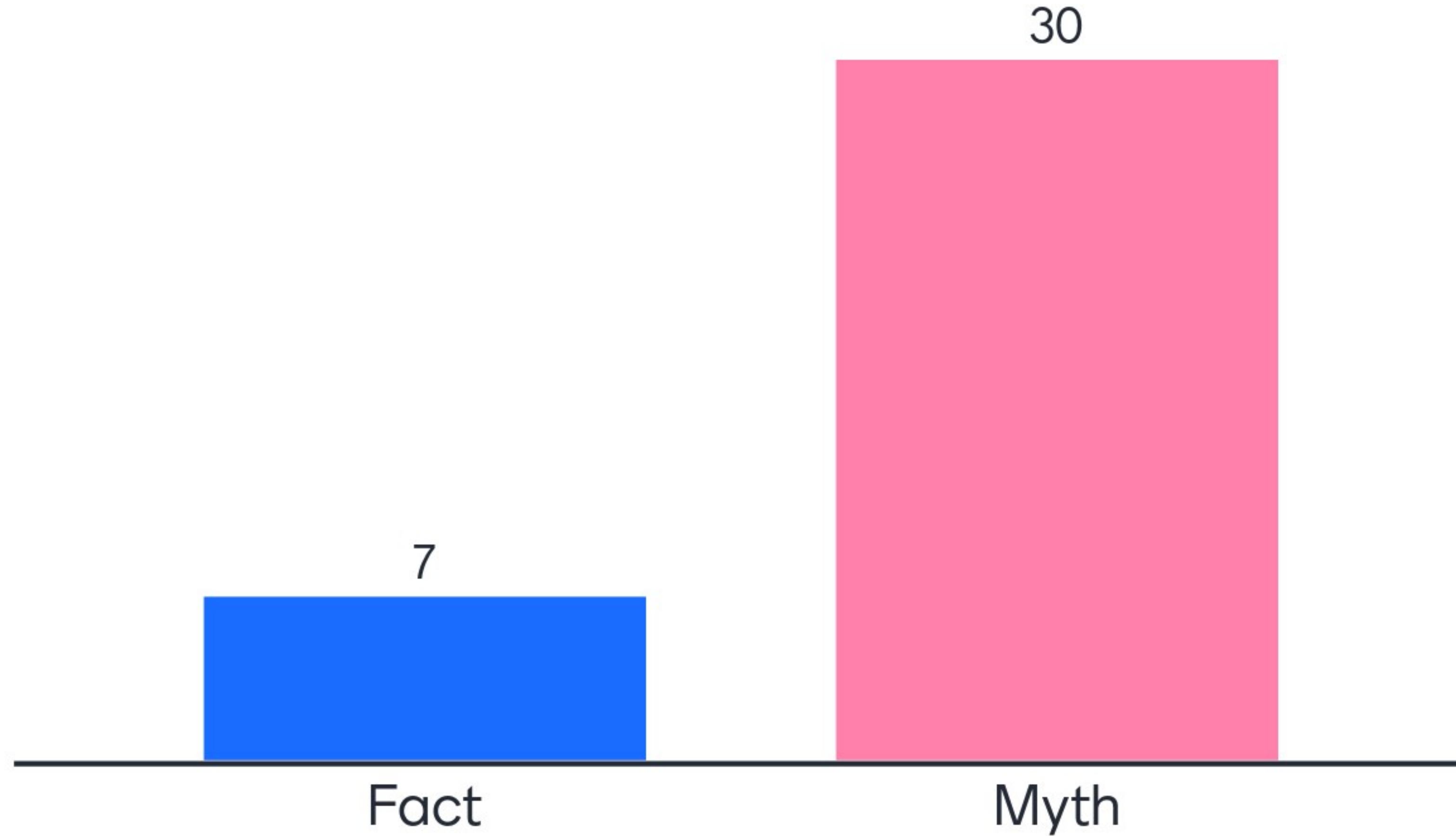
- Breakfast
  - Eggs any style with veggies instead of fries, veggie omelet
  - Fruit with nuts, plain yogurt, or cheese
  - Drop at least one side of the bread on egg sandwich
  - Avoid cereals
- Lunch & Dinner
  - Any protein with cooked veggies
  - Any protein with uncooked veggies (salads, bare burger/sandwich loaded w/veggies)
  - Order steak or ribs with collard greens, spinach or other veggies
  - Drop ultra processed sides: fries, mashed potatoes, mac & cheese and other
  - Have the burrito bowl without the tortilla
  - Make fruits your go to dessert alone or with nuts, plain yogurt, or cheese
- Don't feel guilty when deviating into wrong lane, just don't stay there

# I drink caffeinated drinks all day and sleep fine



- Alerting effects:
  - Begin in ~20 minutes
  - Peak in 60-90 minutes
  - Can last for hours
- Caffeine content in coffee varies widely
- Tea has about ½ the caffeine of coffee
- Large individual differences in the time required to metabolize caffeine
- Drink in small sips to “nurse” the cup over a longer period
- Like any stimulant, caffeine makes sleep more difficult
- Generally, avoid caffeine within 6-8 hours of main sleep period
- Effects vary - some people are even more sensitive
- Reduce caffeine intake
- Increase time between last dose & bedtime

# To unwind and sleep better, I take a night cap



# Alcohol

- Not permitted in CMVs
- Some drivers may use alcohol as a sleep aid at home.
- Alcohol may make you sleepy, but it actually *disrupts* sleep:
  - Disrupts REM sleep
  - Causes “rebound” awakening after a few hours
- Disruptive effects increase with age
- Performance impairment effects greater when you are also sleepy
- Alcohol makes OSA worse

# Smoking & Tobacco Use

- Leading preventable cause of disease, death, and disability
- ~20% of Americans smoke, but nearly **half** of CMV drivers do
- Causes lung cancer, COPD and other lung diseases, heart disease, and many other medical conditions
- >\$1,000 per year in medical costs for each smoker
- Reduces oxygen flow to the brain; worsens OSA
- Strategy: **QUIT!!!**
  - See your doctor
  - Call 1-800-QUIT-NOW
  - Click [www.smokefree.gov](http://www.smokefree.gov) or
  - Click [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

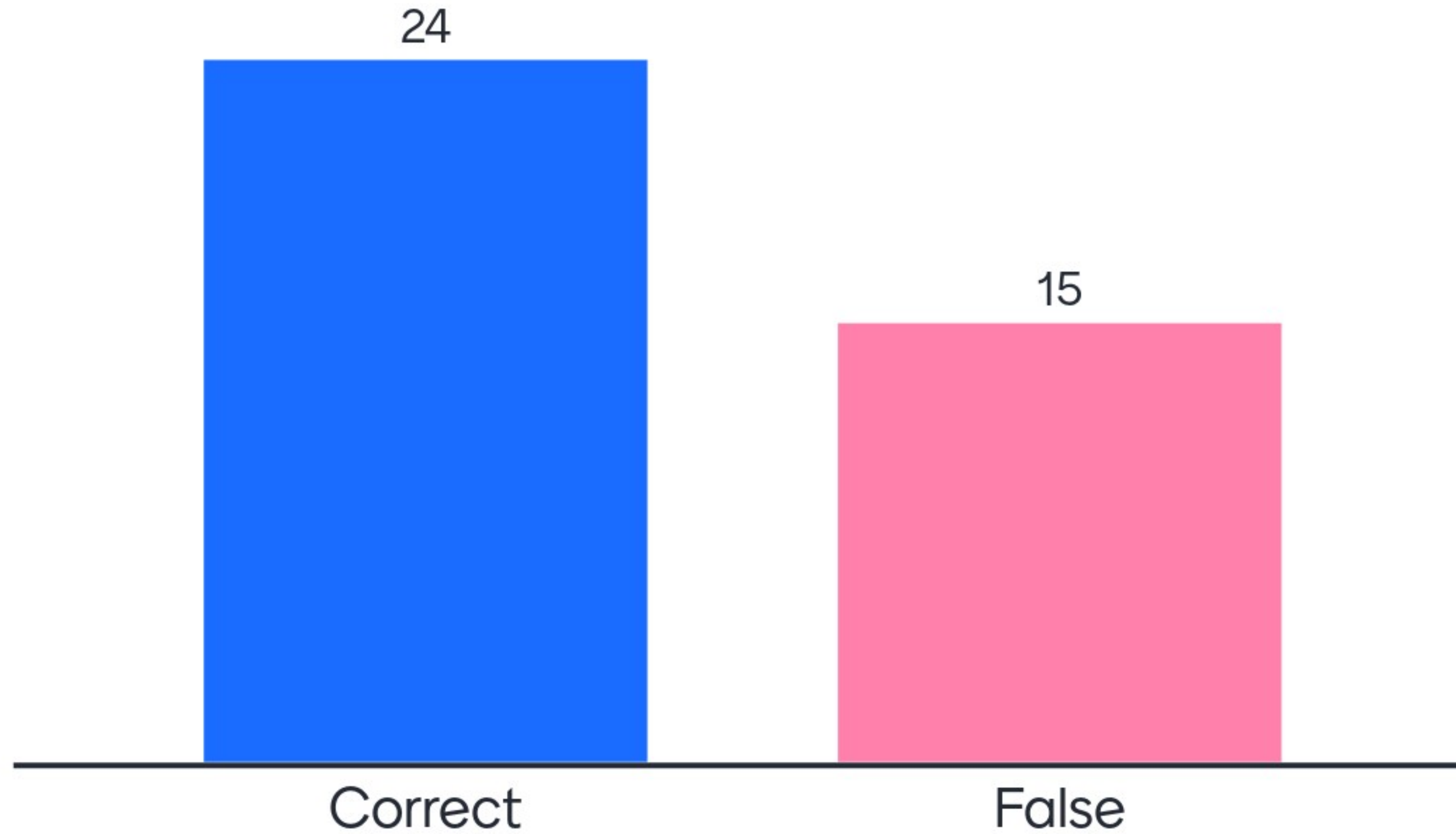
# Amphetamines

- Illegal or available only with a prescription
- Too strong for general use
- Increase activity level but do not improve performance reliably
- Increase heart rate and metabolism, sometimes dangerously
- Often you “crash” several hours after use

# Sleeping Pills

- Hypnotics = drugs used to induce sleep
- Some also used to treat anxiety and stress disorders
- General categories:
  - Non-prescription Over-The-Counter (OTC); e.g., Tylenol PM, Benadryl
  - Prescription:
    - Benzodiazepines (e.g., Halcion, Restoril)
    - Nonbenzodiazepines (e.g., Ambien, Lunesta)
- No sleeping pill provides 100% natural sleep
- Most have side effects
- Most are habit-forming
- Some cause withdrawal symptoms
- Must allow full time for drug to leave your body before driving

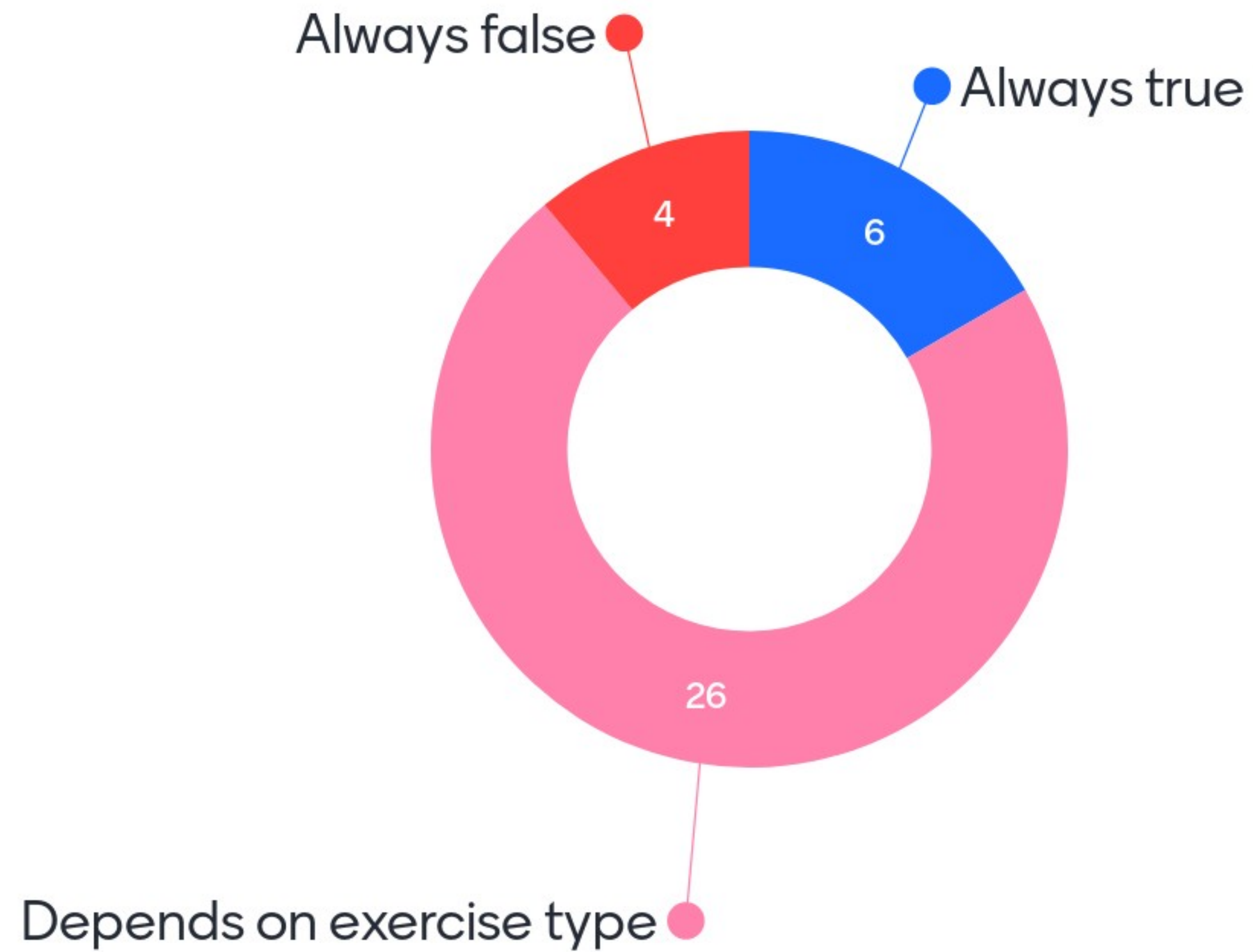
# Based on what I learned today, I should stop taking sleeping pills immediately.



# Other Medications

- Common side effects:
  - Drowsiness
  - Other fatigue
  - Insomnia
- Accordingly, many prescriptions specify when the drug should be taken (e.g., at bedtime)
- Follow dosage instructions carefully
- Safety regulations restrict driver on-road use of medications with stated fatigue side effects

# Exercising right before going to sleep is not recommended.

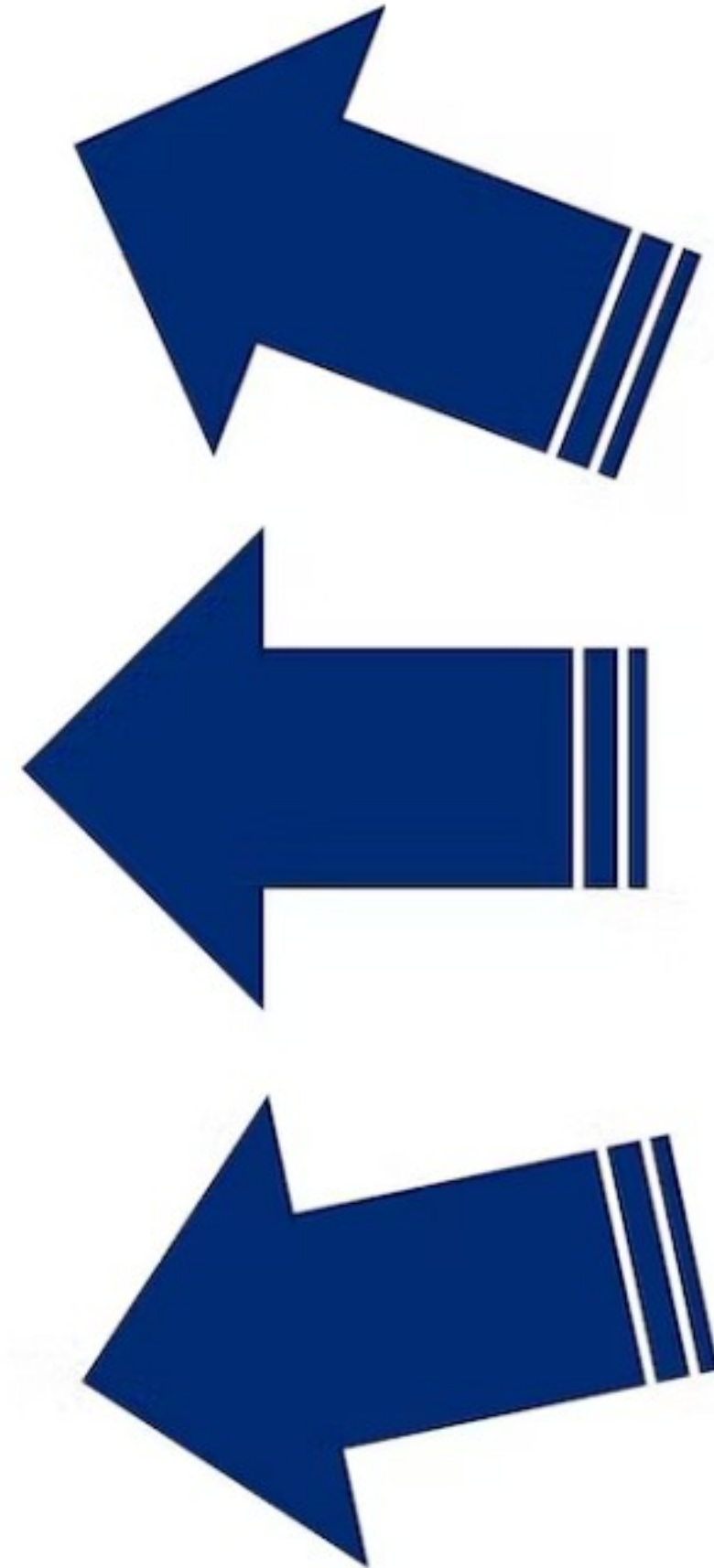


1. Cardiopulmonary
2. Strength bearing
3. Stretching & balancing

- Enhances alertness
- Promotes better sleep
- Lowers stress
- 10-minute walks twice or more per day
- Work out more vigorously on weekends
- Take exercise equipment with you on trips
- Keep a record of your exercise
- Set daily and weekly goals
- Find out what you like and do it

# Wellness Affects All Body Systems

- Messaging
  - Nervous
  - Endocrine
  - Immune
  - Reproductive
- Plumbing
  - Respiratory
  - Cardiovascular
  - Digestive
  - Urinary
- Support
  - Skeletal
  - Muscular
  - Integumentary



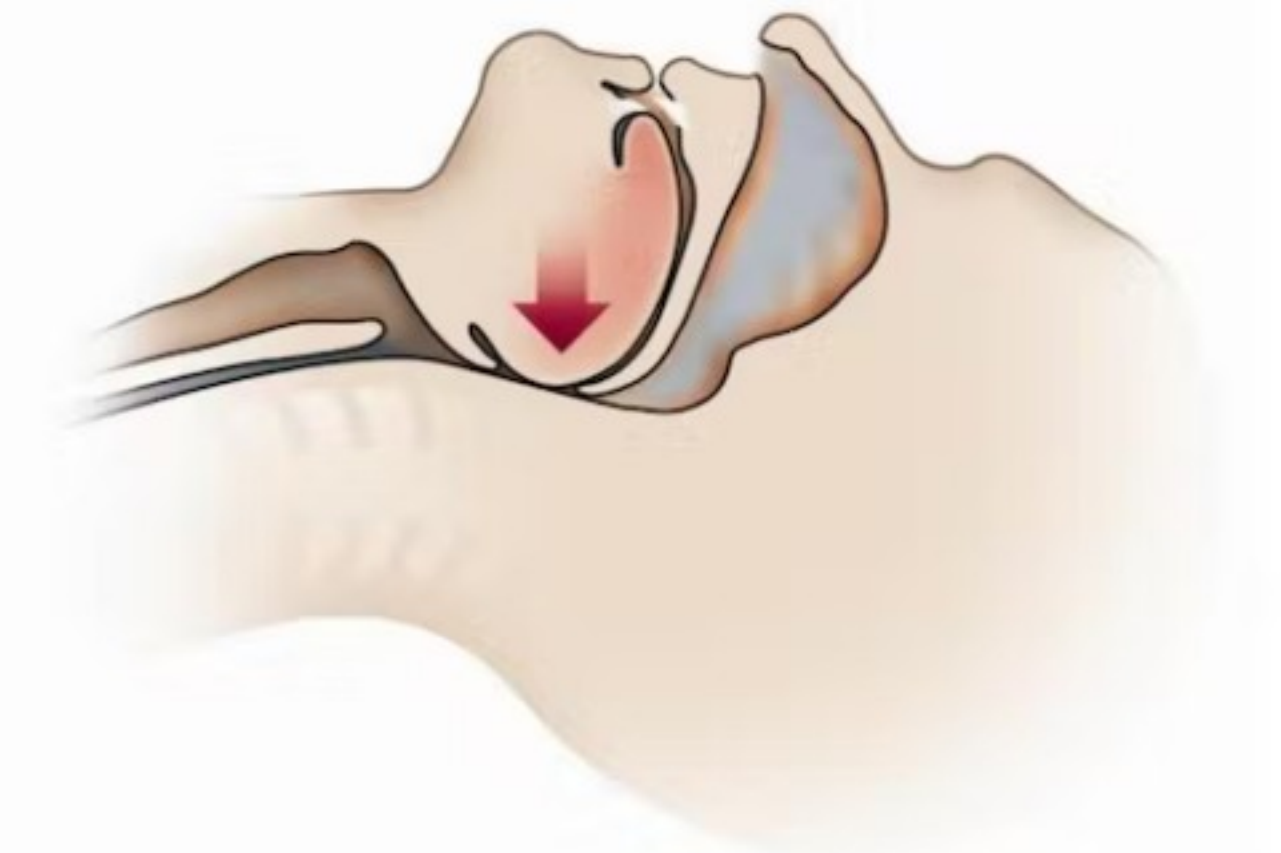
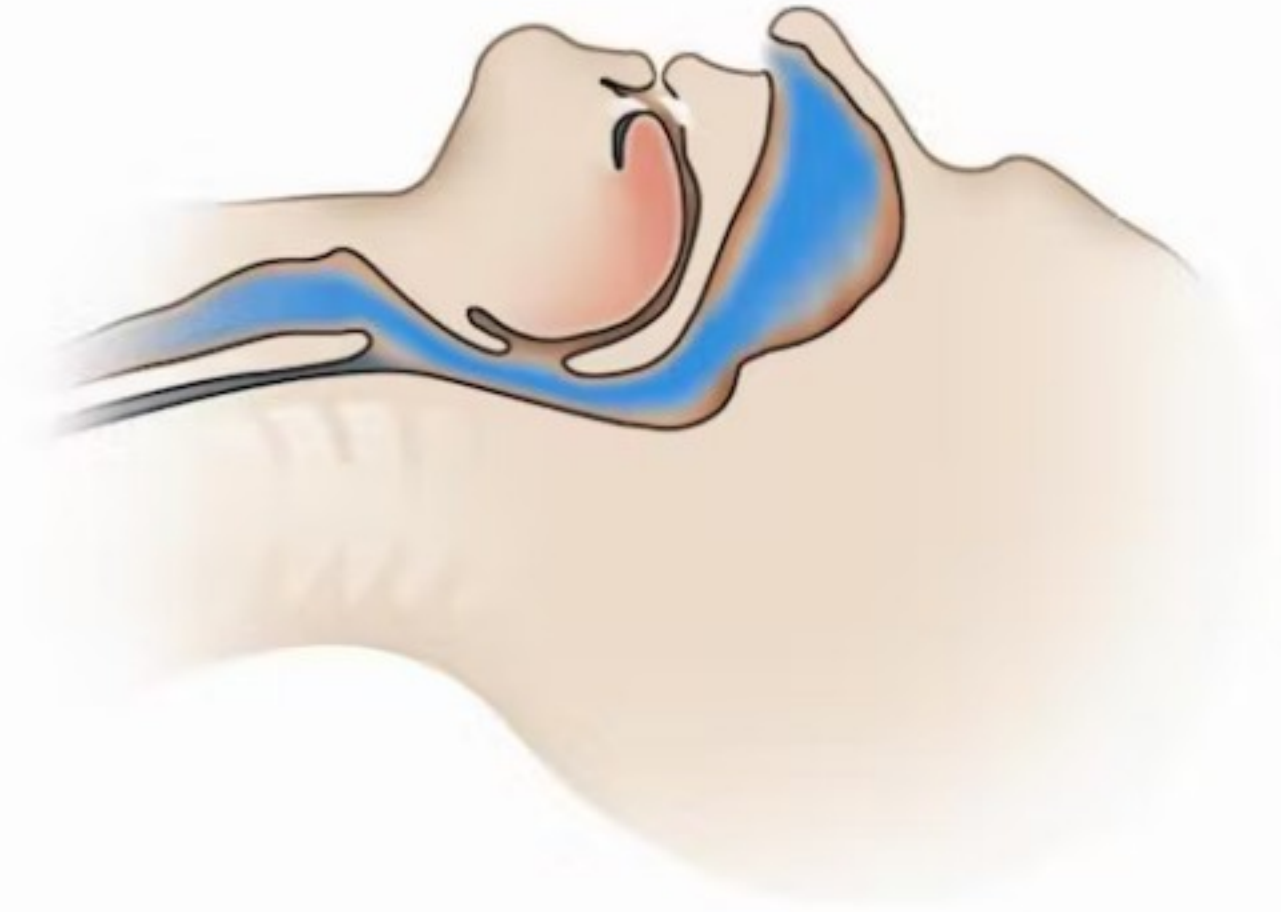
- Sleep
- Positive Relationships
- Positive Behaviors
- Nutrition
- Exercise

# Fatigue Susceptibility Varies

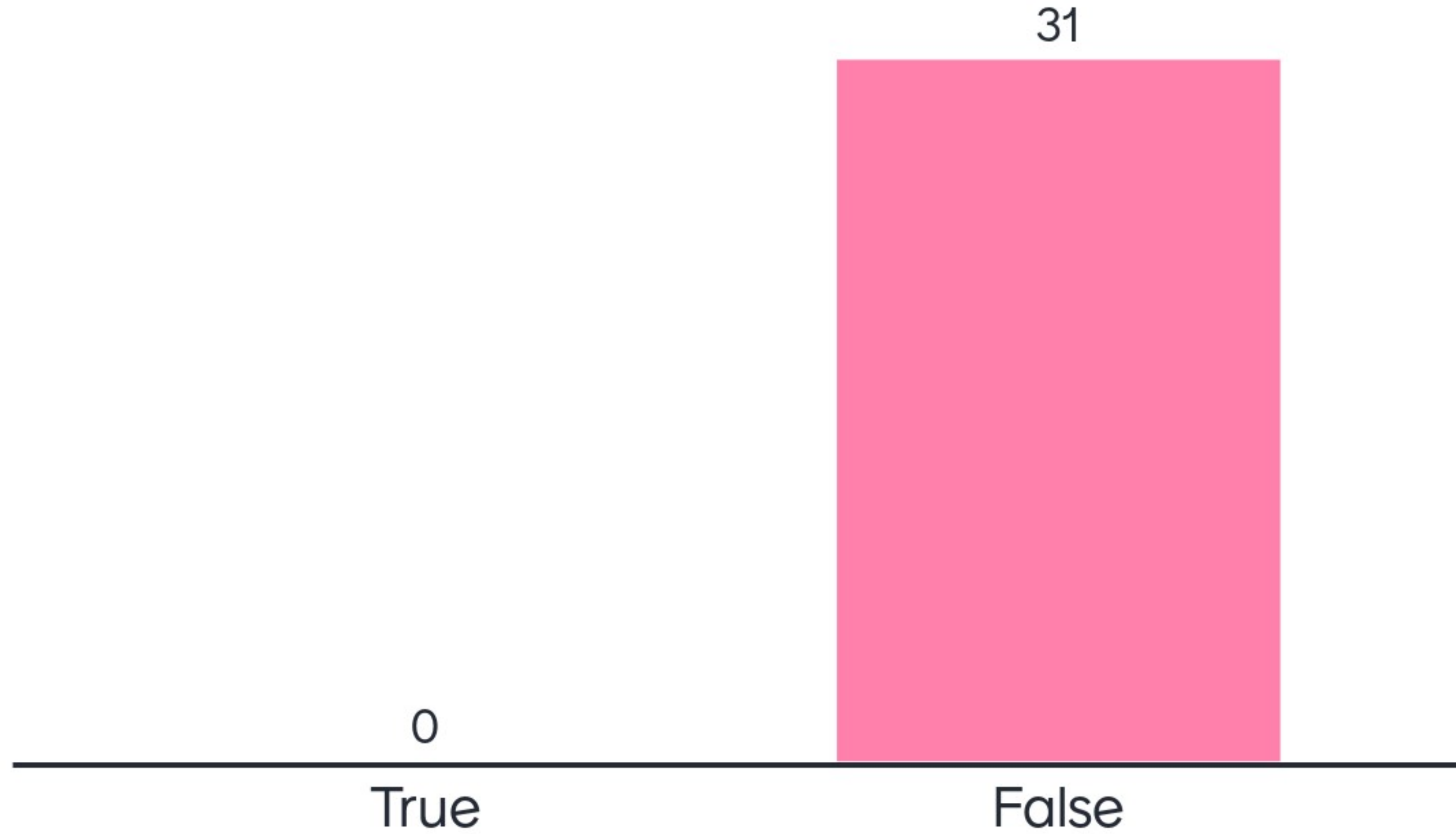
- Sleep-related behaviors
- Differences in health & fitness
- Medications
- Genetic variations
- Sleep disorder symptoms
  - Excessive daytime sleepiness, extremes in ability to go to sleep, loud irregular snoring with gasping
- Sleep disorders
  - Insomnia, narcolepsy, restless leg syndrome, sleepwalking, abnormal circadian rhythms, obstructive sleep apnea (OSA)

# Obstructive Sleep Apnea

- **Apnea** = stoppage of breathing lasting 10+ seconds
- OSA = breathing stops repeatedly during sleep due to closures of the upper airway
- Apnea rate per hour:
  - $<5$  = normal
  - $\geq 5$  = OSA
- OSA severity (mild, moderate, severe) based on rate
- Some people with severe OSA can have 100 per hour



# OSA diagnosed and treated drivers are medically disqualified from operating a CMV



# OSA Risk and Warning Signs

- OSA higher risk
  - Obese individuals, male, 40+ years old, large neck size, recessed chin, small jaw, large overbite, family history
- OSA warning signs
  - Reduced performance, loud and irregular snoring especially with gasping, high blood pressure, diabetes

## Module 8: Driver Sleep Disorders Management (Module 7 for Motor Carriers)

- May 4 Webinar:  
A Motor Carrier's Guide to Establishing a Sleep Disorders Management Program

# General Strategies

- SLEEP!!!
  - Main sleep
  - Naps
- Maintain a healthful lifestyle
  - Follow the five wellness basics
- Practice sleep hygiene
  - Try to keep a regular schedule
  - Go with your circadian rhythm – don't fight it
  - Wind down before sleep
    - Less physical activity
    - Lower lights
- Be smart about caffeine use

# At-Home Strategies

- Get the best sleep possible before starting a trip or work week
- Communicate your sleep needs and get your family's support
- Bedroom should be:
  - Completely dark
  - Cool
  - Quiet
- Pre-sleep routine
- Be active but don't exhaust yourself. Take time to relax

# On-the-Road Strategies

- Try to get as much sleep on the road as you get at home
- Rest breaks with **naps** are most beneficial
- Rest breaks without naps
- Moving your body
- Conversation if it is not distracting
- Exercise
- Avoid heavy meals
- Wear your safety belt

# Night Driving Strategies

- Advantage of night driving: less traffic
- Disadvantages:
  - Fatigue, related to circadian rhythms
  - More drunk/reckless motorists
  - Poor visibility
- Use light and dark to “fool” your body:
  - Bright lights simulate daybreak
  - Dark simulates night and bedtime
- Use caffeine, but carefully
- Consider taking sleeper berth period/nap in pre-dawn hours
- Get more recovery sleep on weekends
- Not for everybody

# Dealing with Shift/Time Zones Strategies

- Be aware of your “body clock”
- Short trips/shift changes: stick with your regular sleep schedule
- Longer changes:
  - “Pre-adjust” before change
  - Shift your pre-bed, “evening” routine
  - Use light and dark to help you adjust
  - To stay awake, be physically active and interact with others
- Getting more sleep generally makes changes easier

# Team Driving Strategies

- Plan sleeper berth periods in advance to be compliant and beneficial
- When possible, take sleep periods during circadian valleys
- Avoid both caffeine and strenuous activity in hours before breaks
- Keep sleeper berth totally dark or use eyeshades
- Don't drive immediately after awakening
- Team driving is a partnership
- To sleep well, each driver must have full confidence in the other driver
- Driver should strive to be a "smooth operator"
- Agree on a game plan for sleep and rest that meets each driver's needs

# What was the most important takeaway on driver fatigue that you just learned today?

Fatigue is not just about sleep

You need good sleep

Get more sleep

Nap for 20 or 90 minutes

balance

Rem cycles

About the NAFMP

20 and 90 minute naps are good

Value of sleep

# What was the most important takeaway on driver fatigue that you just learned today?

Listen to your body

Good sleep is better

Get plenty of rest

Get enough good sleep

Diet is important

Don't drink alcohol, smoke, or caffeine. SLEEP, SLEEP, SLEEP

I'm not lazy when I sleep in or nap.

There is a holistic approach to managing sleep

Importance of sleep

# What was the most important takeaway on driver fatigue that you just learned today?

Fueling the body with balanced foods

Going to bed sleep habits

Don't set alarm on weekends

How to recognize when your fatigue and tools to better manage it

Many factors come into play

NAFMP resources

That I'm currently fatigued

A lot of different things are required for good sleep.

Fatigue management not a priority but a principle,

# What was the most important takeaway on driver fatigue that you just learned today?

Make up sleep deficit on weekends

Diet is important

Knowledge of fatigue

# Please Help Us Pass the Word



Please let drivers know about the NAFMP resources by distributing the NAFMP Postcard

- 50 postcard packets available at registration desk
- Place complimentary orders online by navigating to the bottom of [nafmp.org](https://nafmp.org)
  - Last item on footer menu

**Fatigue is one of the main causes of heavy-vehicle crashes.**

Source: CCMTA - Human Factors Report

That's partly because we often overestimate how alert we really are. Many fatigued drivers who crashed and were lucky to survive, never felt tired.

The solution:

- Learn ways to eliminate the likelihood that you may get drowsy, tired or bored while driving.
- Identify what maintains your alertness and what reduces it.
- Become more productive, healthy and happy by better managing fatigue.

Take the free driver education course at [nafmp.org](https://nafmp.org).



SCAN ME

**Your input matters.  
We want to hear from you.**

## Fatigue Management Community Forum

Join the community of professional drivers, trainers, dispatchers, managers, executives, shippers, receivers and brokers to discuss, learn and share in conversations about fatigue management.

The forum is available at [lms.nafmp.org](https://lms.nafmp.org).

Add to the conversation by registering for free from any of the learning modules so you can post your questions, comments and feedback to the community forum.



# Order Postcards

## ABOUT NAFMP

[About NAFMP](#)

[Partners and Participants](#)

[FAQs](#)

## TRAINING

[Training Overview](#)

[Motor Carrier Executives & Managers](#)

[Safety Managers & Other Trainers](#)

[Dispatchers & Driver Managers](#)

[Commercial Vehicle Drivers](#)

[Driver Spouses & Families](#)

[Freight Shippers & Receivers](#)

[PowerPoint Training \(Downloads\)](#)

## MORE RESOURCES

[Improve Driver Safety](#)

[ROI Calculator](#)

[Contact](#)

[Order Postcards](#)



# Check-In & Rate This Session in App



**CVSA<sup>®</sup>**  
**ANNUAL CONFERENCE  
AND EXHIBITION**

SEPTEMBER 18-22, 2022

*Rapid City, South Dakota*



# Questions?

# Thank you!

The CVSA logo is displayed in a large, white, stylized font. The letters 'C', 'V', and 'S' are connected, with a swoosh element above the 'V'. The 'A' is separate and also stylized. A registered trademark symbol (®) is located to the right of the 'A'. The logo is centered over a blue-tinted background image of a semi-truck and two police officers.

CVSA®