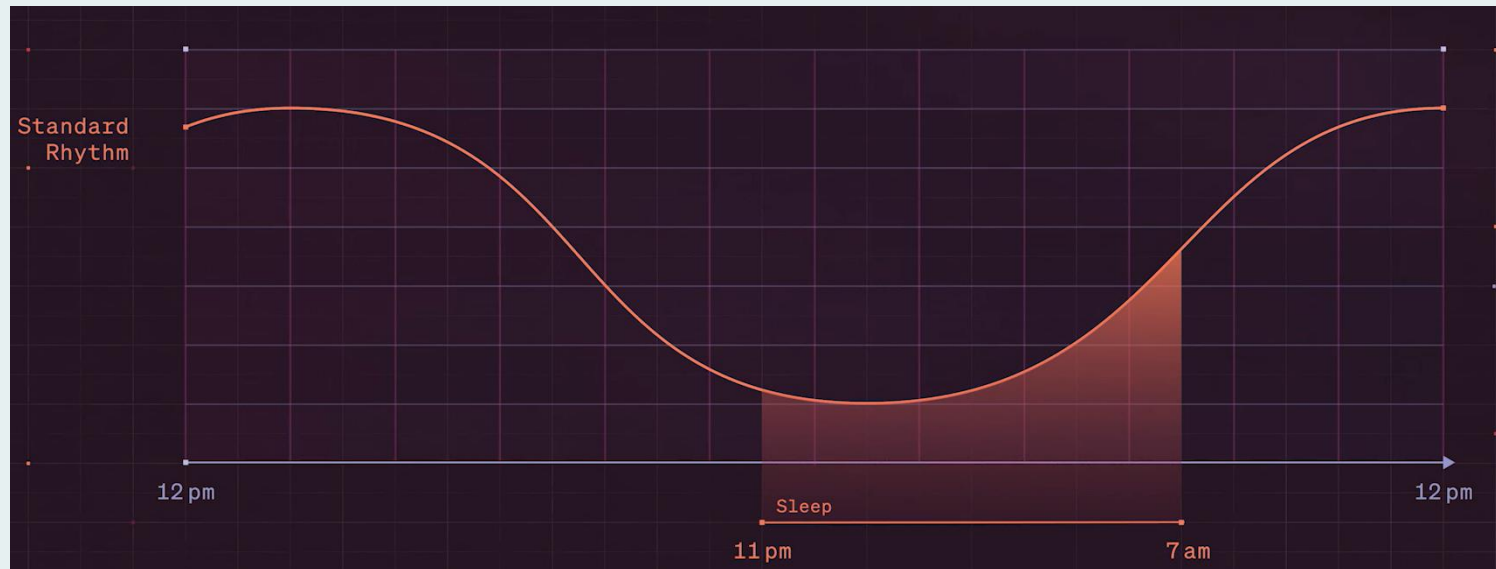


Ritmo Circadiano



Descoberta do Século

1729

Jean Jacques d'Ortous de Mairan
Geofísico Francês



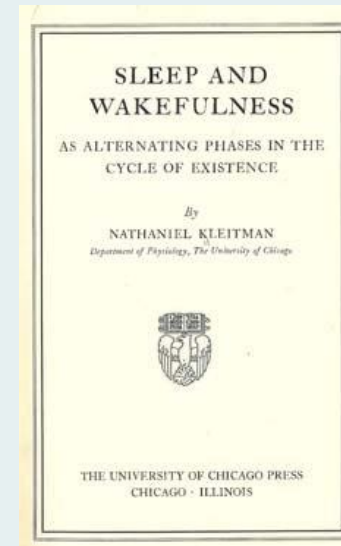
Dormideira
Mimosa Pudica

Novas Descobertas

Regularidade – 1938

Nathaniel Kleitman

Fisiologista Americano



Novas Descobertas

Luz – 1972

Friederich K. Stephan & Irving Zucker
Pesquisadores Americanos

Circadian Rhythms in Drinking Behavior and Locomotor Activity of Rats Are Eliminated by Hypothalamic Lesions

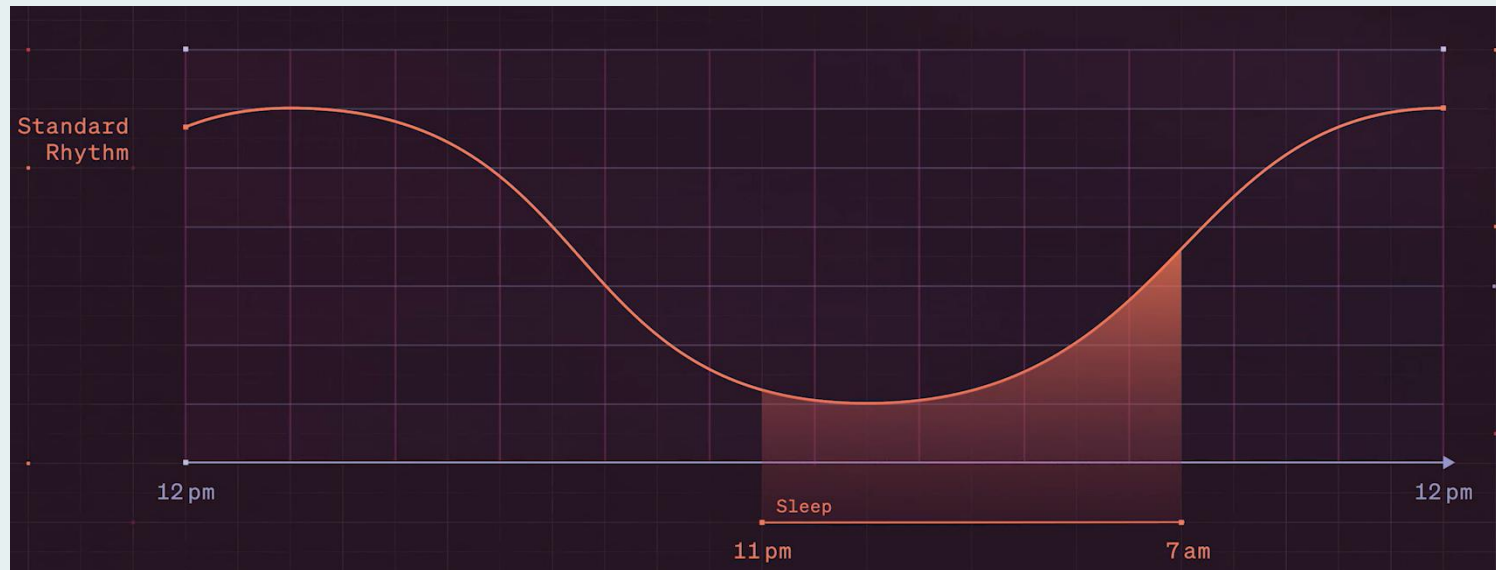
(suprachiasmatic and medial preoptic nuclei/retino-hypothalamic projection)

FRIEDRICH K. STEPHAN AND IRVING ZUCKER

Department of Psychology, University of California, Berkeley, Calif. 94720

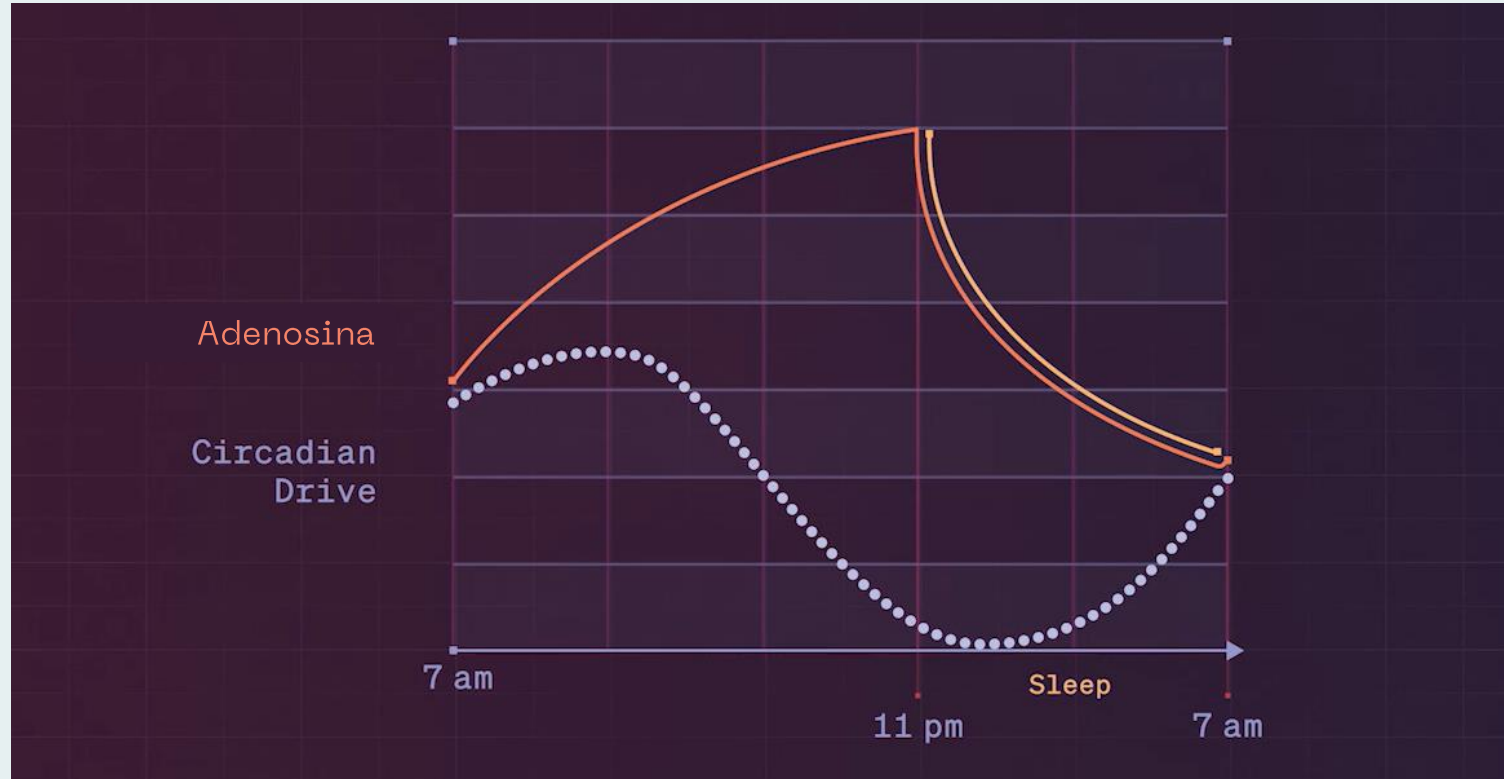
Communicated by Frank A. Beach, February 28, 1972

Ritmo Circadiano

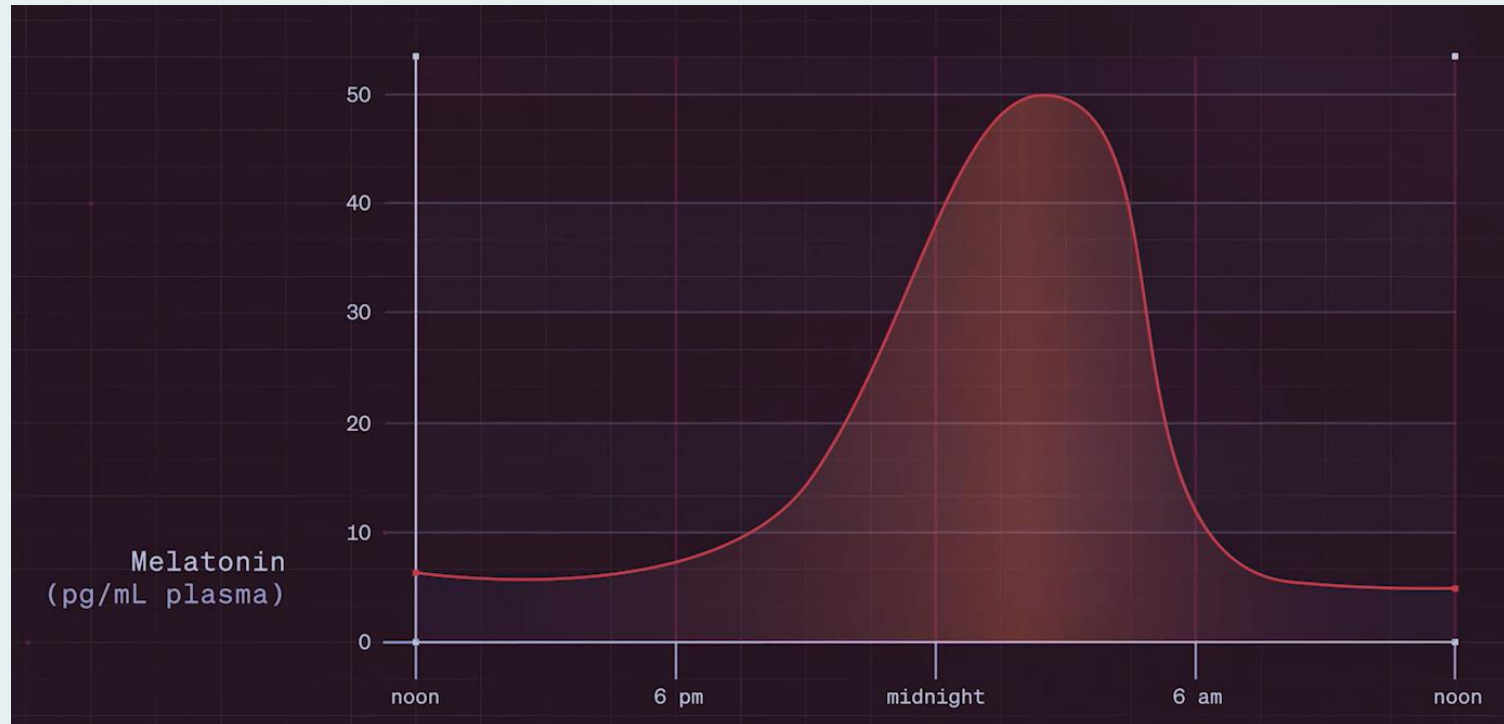


Cortisol, Adrenalina vs. Adenosina, Melatonina

Pressão Do Sono

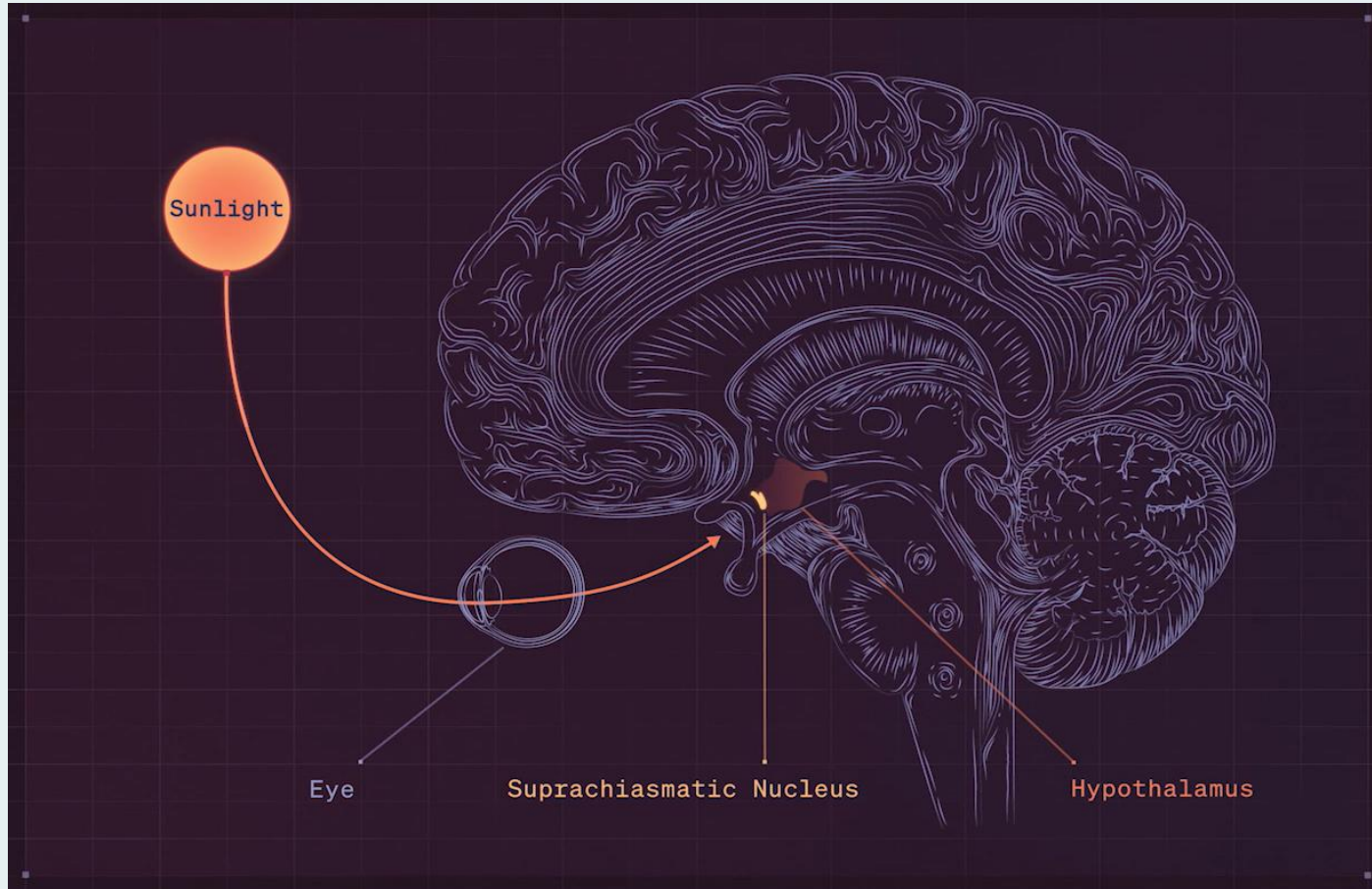


Ciclo da Melatonina



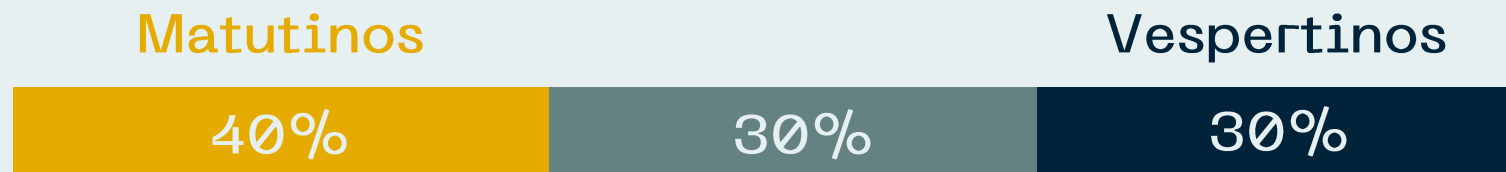
Pico durante o sono, nos mantém dormindo

Calibragem Por Luz



Cronótipo Genético

Matutino vs. Vespertino



Ainda precisam de 7–9 horas de sono
Ainda acordam de manhã e dormem a noite

Descobrendo Seu Cronótipo

AutoMEQ

Automated Morningness-Eveningness Questionnaire (AutoMEQ)

Welcome to the Automated Morningness-Eveningness Questionnaire¹

Our questionnaire gives you advice about your "circadian rhythm type."

There will be 19 questions about your daily sleep-wake habits and the times of day you prefer certain activities. Answering should take only about 5-10 minutes. As soon as you finish, you will receive personalized feedback.

For each question, select the answer choice that best describes you. Base your judgments on how you have felt in recent weeks.

Your score is **71**.

YOUR MORNINGNESS-EVENINGNESS TYPE IS CONSIDERED TO BE DEFINITE MORNING.

Morningness-eveningness scores range from 16-86. Scores of 41 and below indicate "evening types." Scores of 59 and above indicate "morning types." Scores between 42-58 indicate "intermediate types."

16-30	31-41	42-58	59-69	70-86
definite evening	moderate evening	intermediate	moderate morning	definite morning

Your score allows us to estimate when your brain begins to produce the nighttime hormone melatonin*, which normally occurs before you are ready to fall asleep.

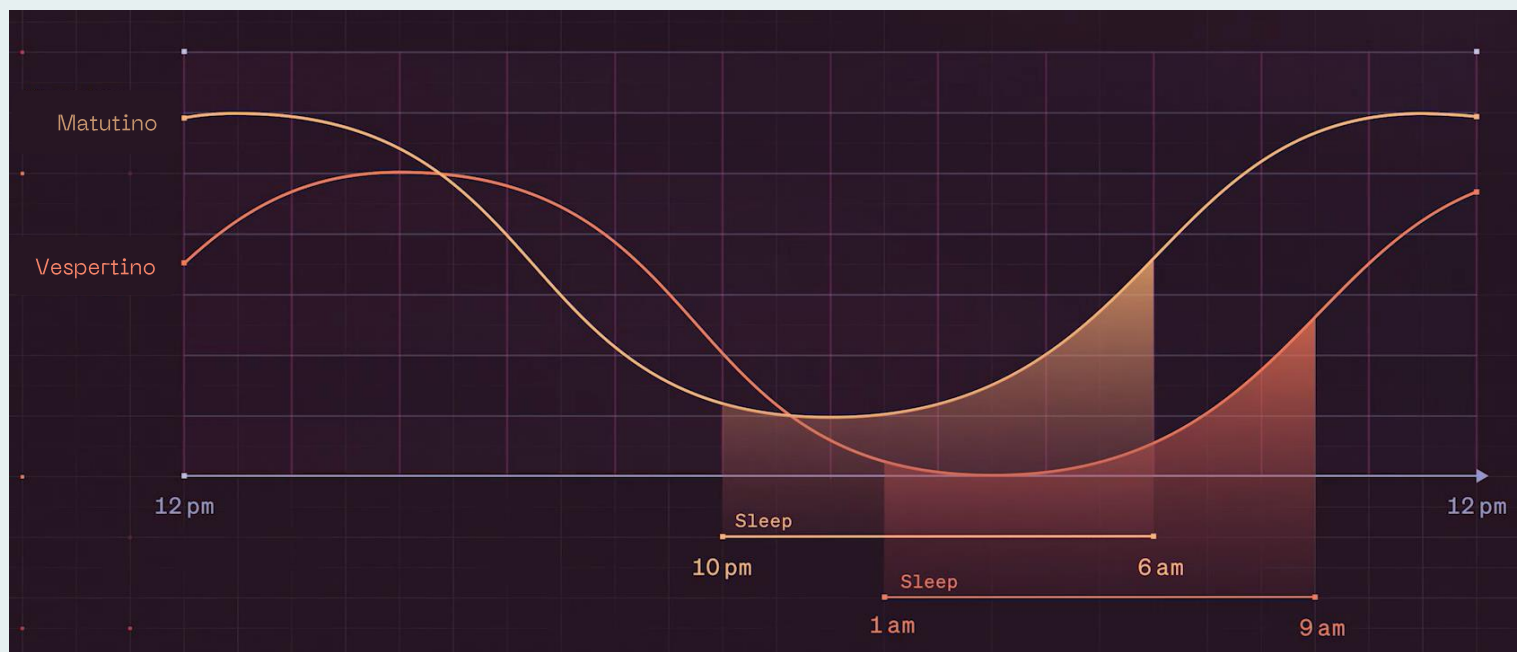
WE ESTIMATE THAT YOUR MELATONIN ONSET OCCURS AT ABOUT 8:00 *pm*.

*saliva concentration of 3 picograms per milliliter

The time you are first able to fall asleep easily (assuming that you keep a regular sleep schedule) is related to the time that your brain begins to produce melatonin in the evening or at night.

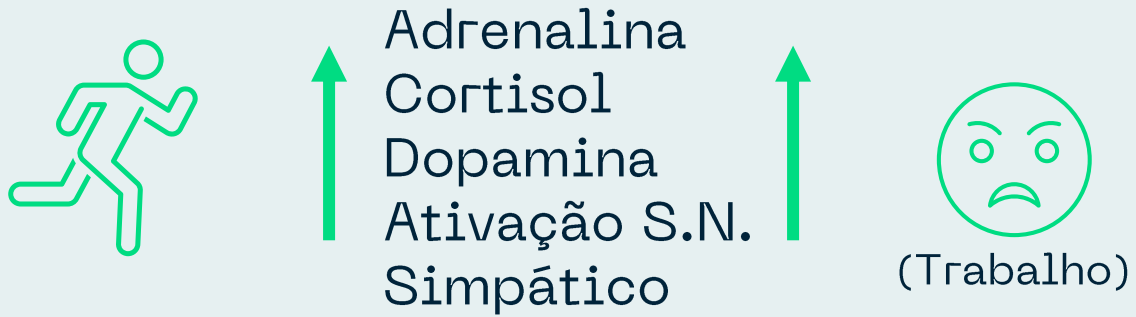
WE ESTIMATE THAT YOUR "NATURAL" BEDTIME IS AT ABOUT 10:30 *pm*.

Regularidade



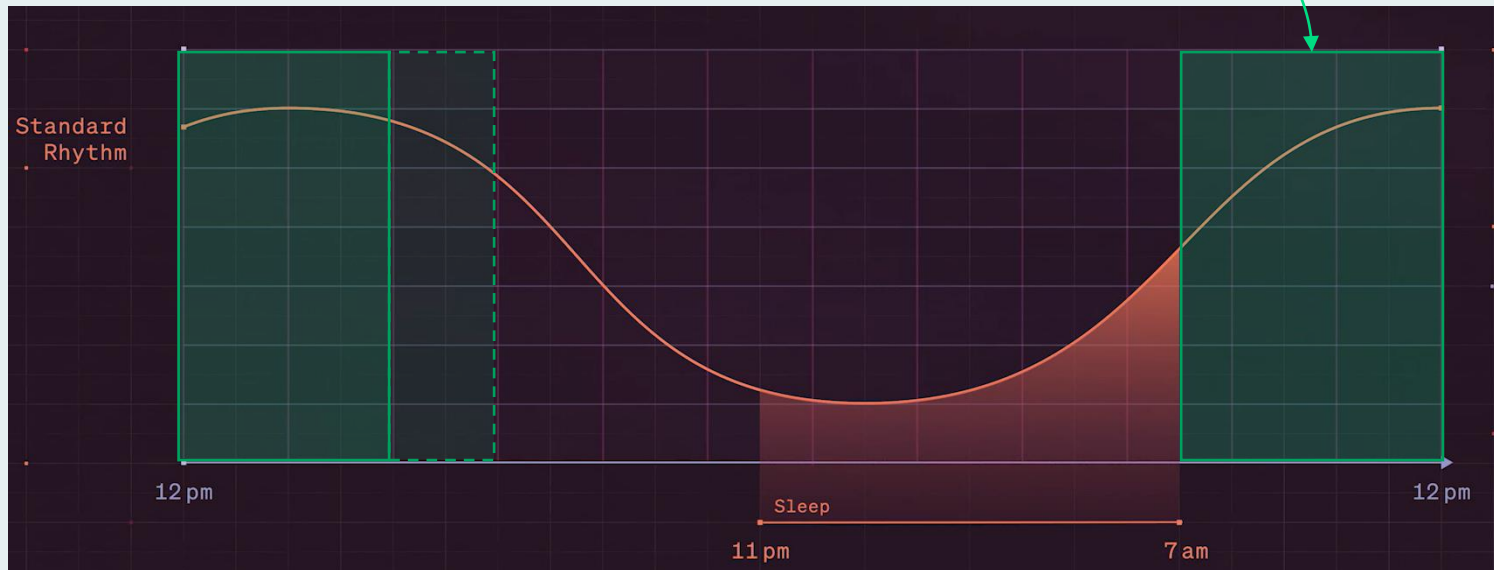
Quanto mais repetitivo o ciclo, melhor

Exercício & Stress



Exercício & Stress

↑ Adrenalina
Cortisol
Dopamina ↑

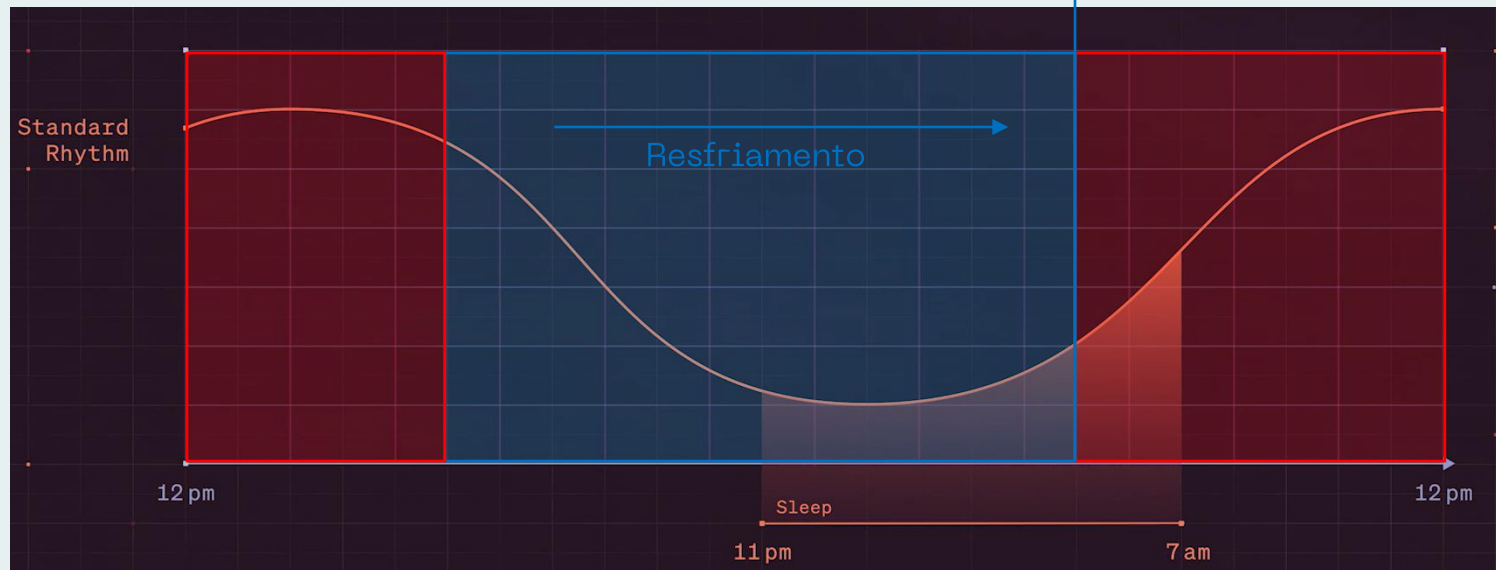


Temperatura

Temperatura
Corporal do "Core"

36,5 a 37,5 °C

Mínimo de
Temperatura:
2h antes de acordar

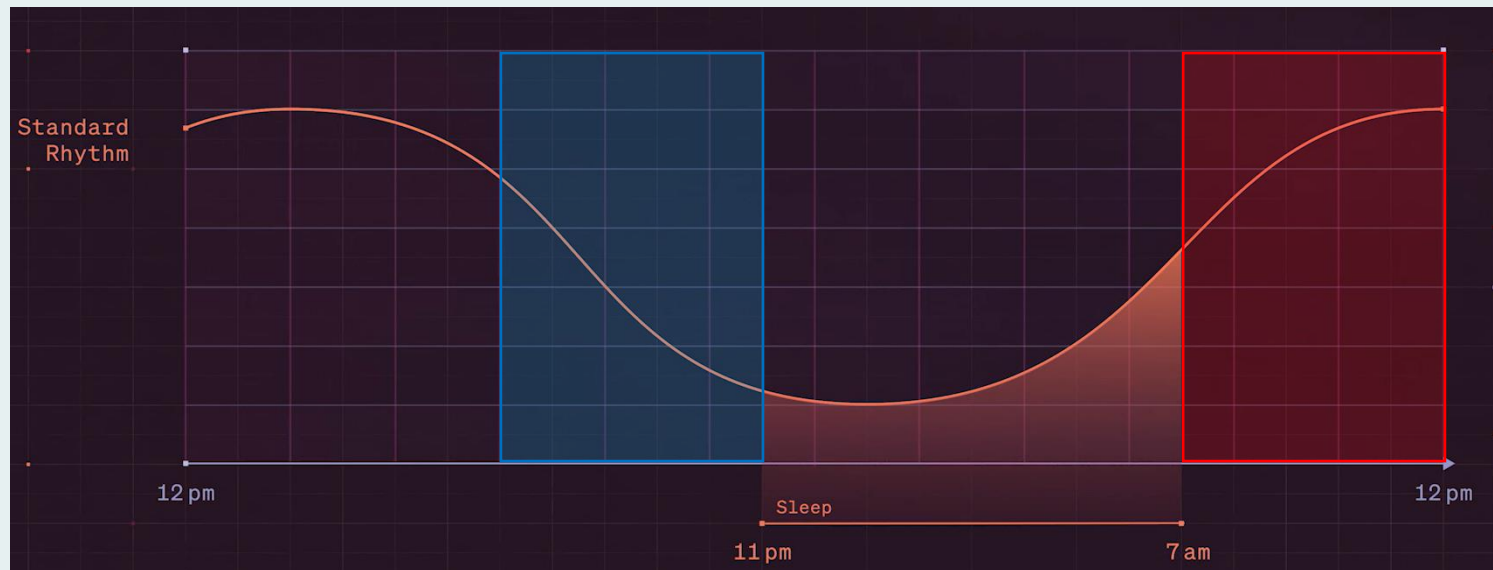


Termostato Corporal

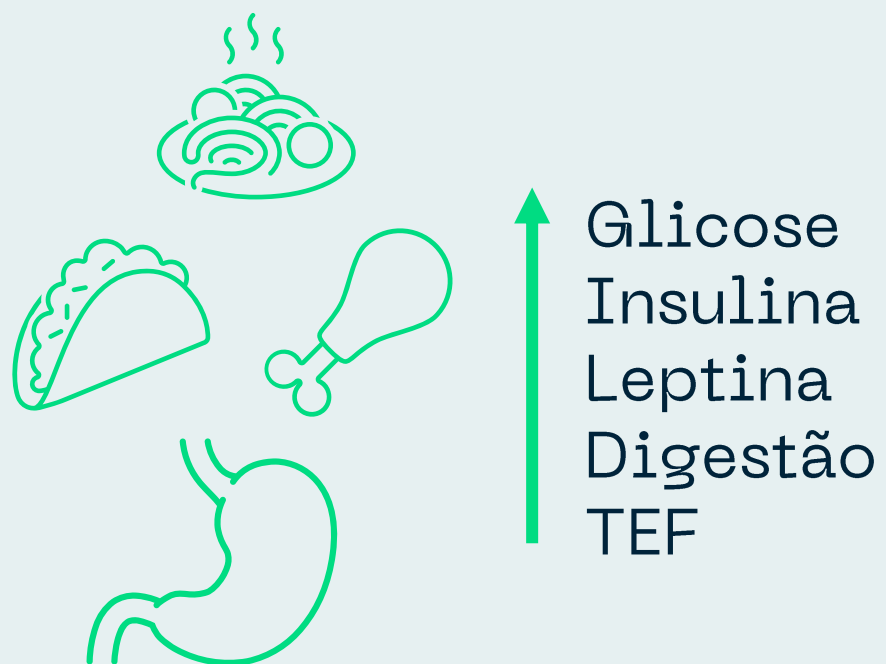
Temperatura Corporal Periférica

Aquecer a periferia, esfria o core
Banho quente, Sauna

Esfriar a periferia, aquece o core
Banho Gelado, Frio

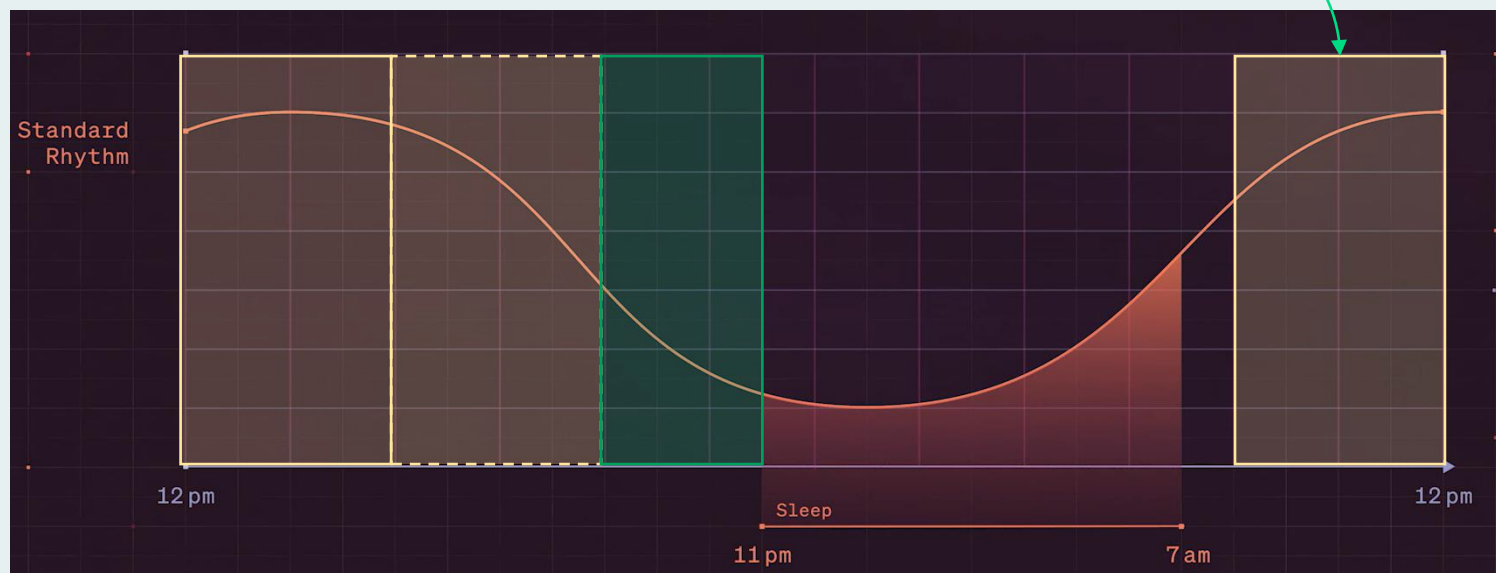


Alimentação



Alimentação

↑
Insulina
Glicose
Leptina
↑



Alimentos Pré-Sono

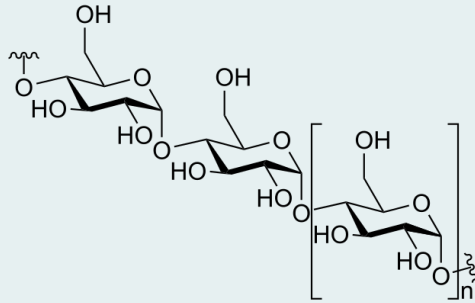
AJUDA

- Fibras prebióticas
- Proteínas magras
- Alimentos ricos em triptofano: peixes, aves, banana, leite, ovo
- Carboidratos complexos

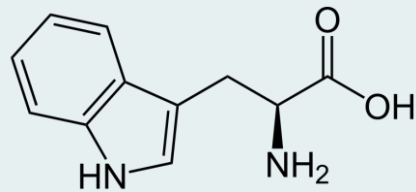
ATRAPALHA

- Gordura saturada
- Açúcar em excesso
- Alimentos termogênicos: pimentas (capsaicina, chocolate (cafeína), gengibre (gingerol), canela (cinamaldeído)
- Alimentos Vasodilatadores: Beterraba, Cacau, Rúcula

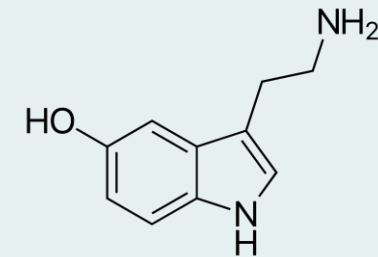
Efeito Serotoninérgico



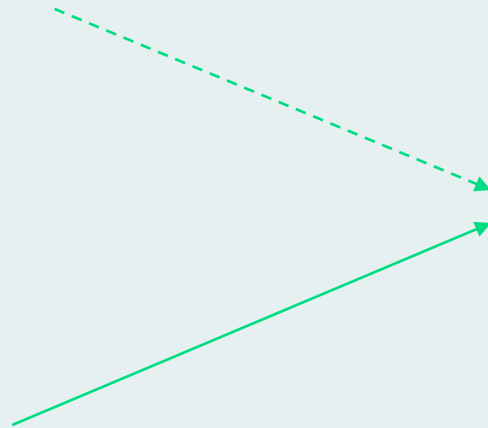
Polissacarídeo
"Carboidrato Complexo"



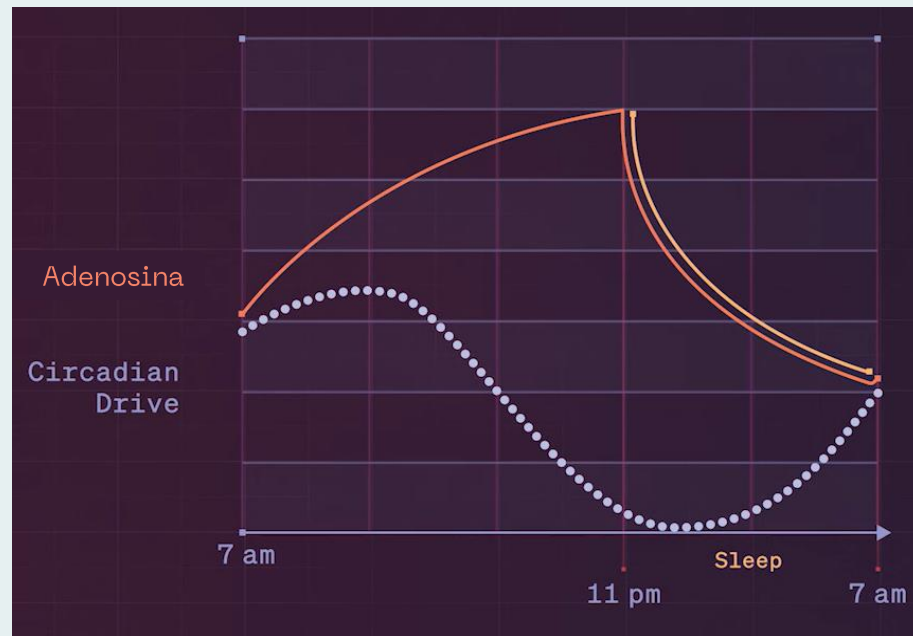
L-Triptofano



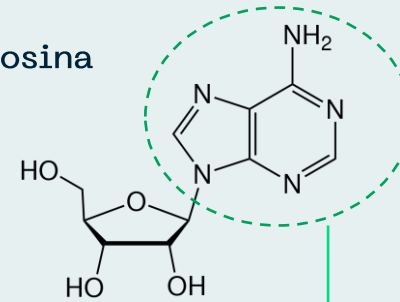
Serotonina



Efeito da Cafeína

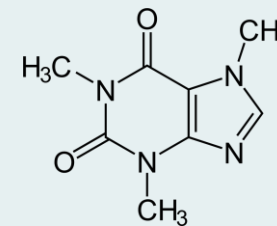


Adenosina

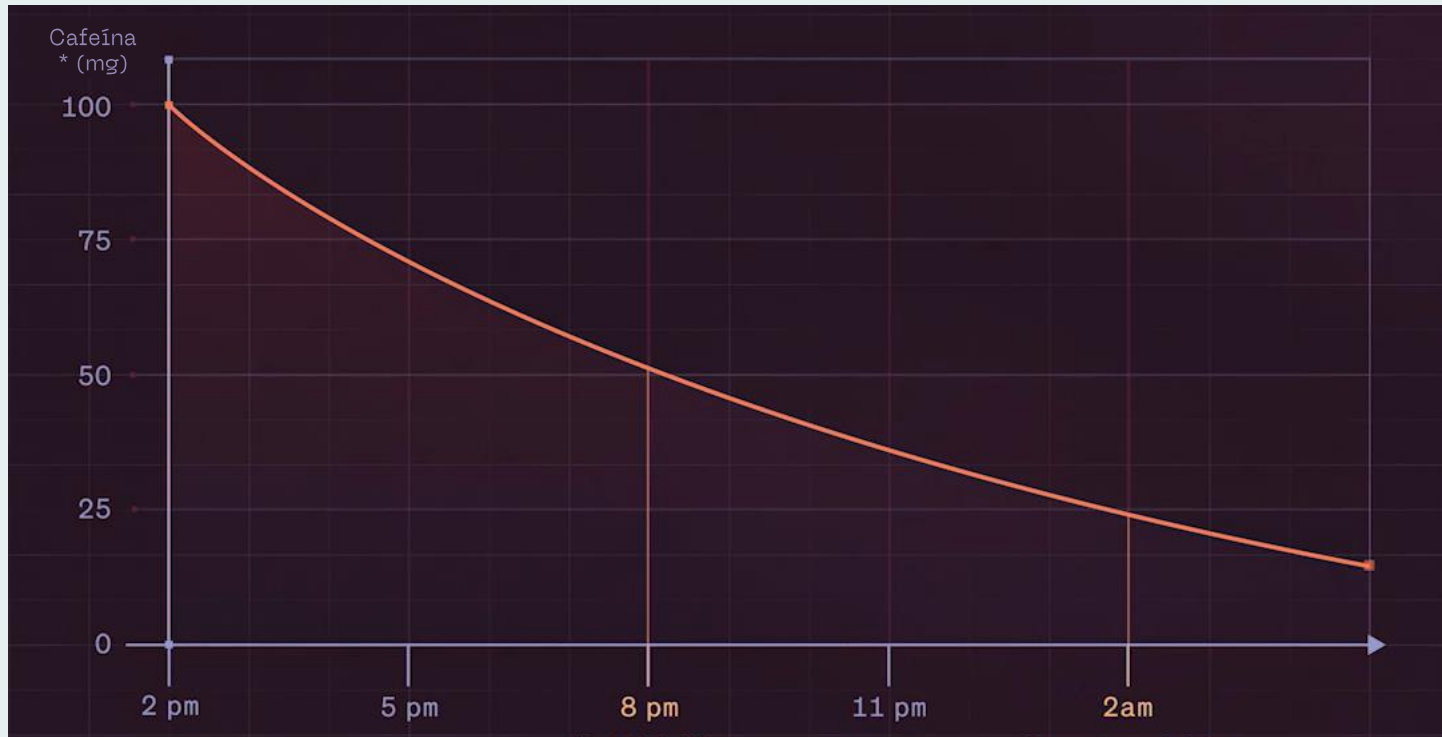


Sítio receptor
similar
Antagonista da
adenosina

Cafeína

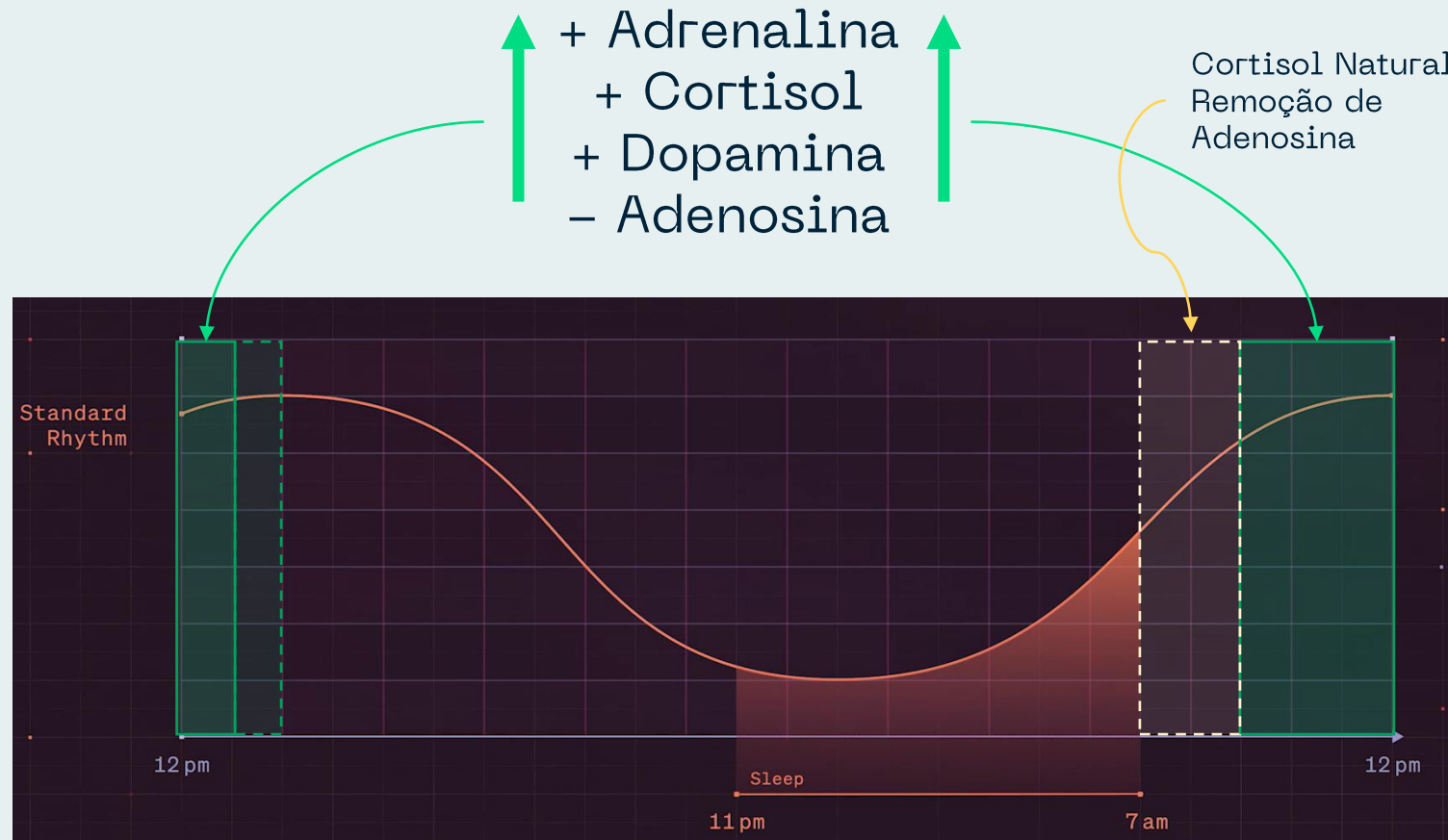


Duração da Cafeína



Geneticamente Dependente* do gene CYP1A2

Timing da Cafeína



Efeito do Álcool

Álcool está na classe de drogas sedativas

Sedação não é sono

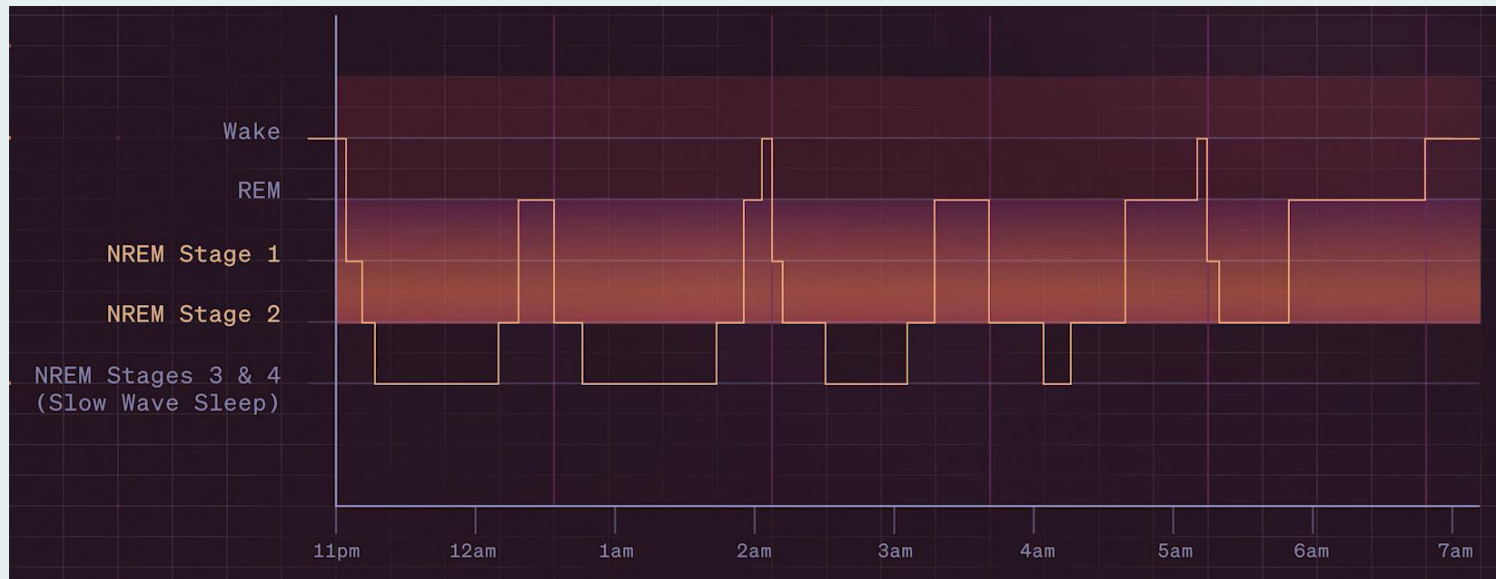


Sono Saudável

Poucos momentos acordados

Equilíbrio entre o tempo em cada fase

Predominância de Sono Profundo & REM



Efeito do Álcool

Mais momentos acordado (fragmentação)

Mais sono leve (NREM 1&2)

Menos Sono Profundo & REM



Medicamentos & Sono



Medicamentos & Sono

Devem ser usados:

1. De acordo com a recomendação clínica
2. Em caso de existência de um patologia
3. De forma pontual e com prazo determinado
4. De forma a iniciar um tratamento
5. Para amenizar riscos piores de perda de sono

Nunca se automedique.

Ambiente do Sono

