**negli USA, negli ultimi 40 anni, le persone hanno ridotto la durata delle ore di sonno, in media, di 2 ore e la prevalenza di adulti che dormono meno di 7 ore per notte è più che raddoppiata dal 1961 al 2003, arrivando ad oltre 37%.**

**Papa**
Polonia infelix: Benedetto XVI nella rete dei preti-spia p.48

**Clima**
Effetto serra, effetto boom: ecco chi ci guadagna p.36

**Obesità**
Scoperta: se dormi poco rischi di ingrassare p.142

l'espresso
Settimanale di politica cultura economia
N.2 anno LIII 18 gennaio 2007

**SALUTE** BENESSERE / LA GUERRA AI CHILI DI TROPPO

# Chi non dorme ingrassa

IL SECOLO XIX

Quotidiano

Data 19-11-2009
Pagina 9
Foglio 1

GLI EFFETTI COLLATERALI DEI DISTURBI "NOTTURNI"

# Chi non riposa è smemorato e grasso

**Gli studi scientifici dimostrano che chi dorme poche ore si ammala di più, affatica il cuore e perde concentrazione**

che facilitano la comunicazione tra cellule nervose. Il bisogno di dormire è quindi un sistema efficace dell'organismo per dare il via alla febbre e alle altre reazioni che consentono di combattere adeguatamente i virus. In

moria a lungo termine, quella che si "deposita" nel cervello e si mantiene negli anni, e ci permette di ricordare sia i nomi delle persone sia la capacità di fare, come guidare o suonare uno strumento. Lo fa pensare una ricerca

EDITORIAL

# A Good Night's Sleep: Future Antidote to the Obesity Epidemic?

*Jeffrey S. Flier, MD*
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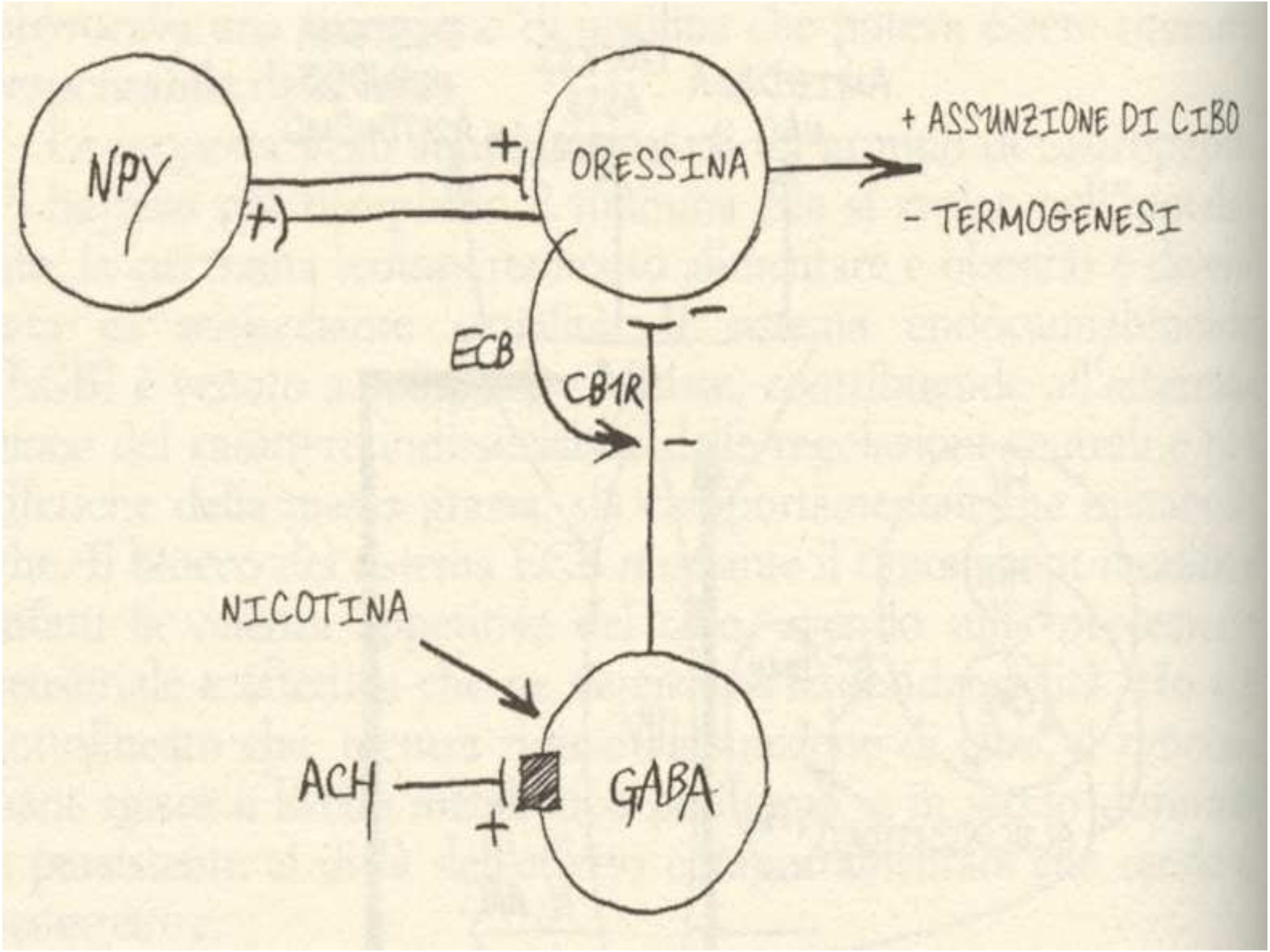
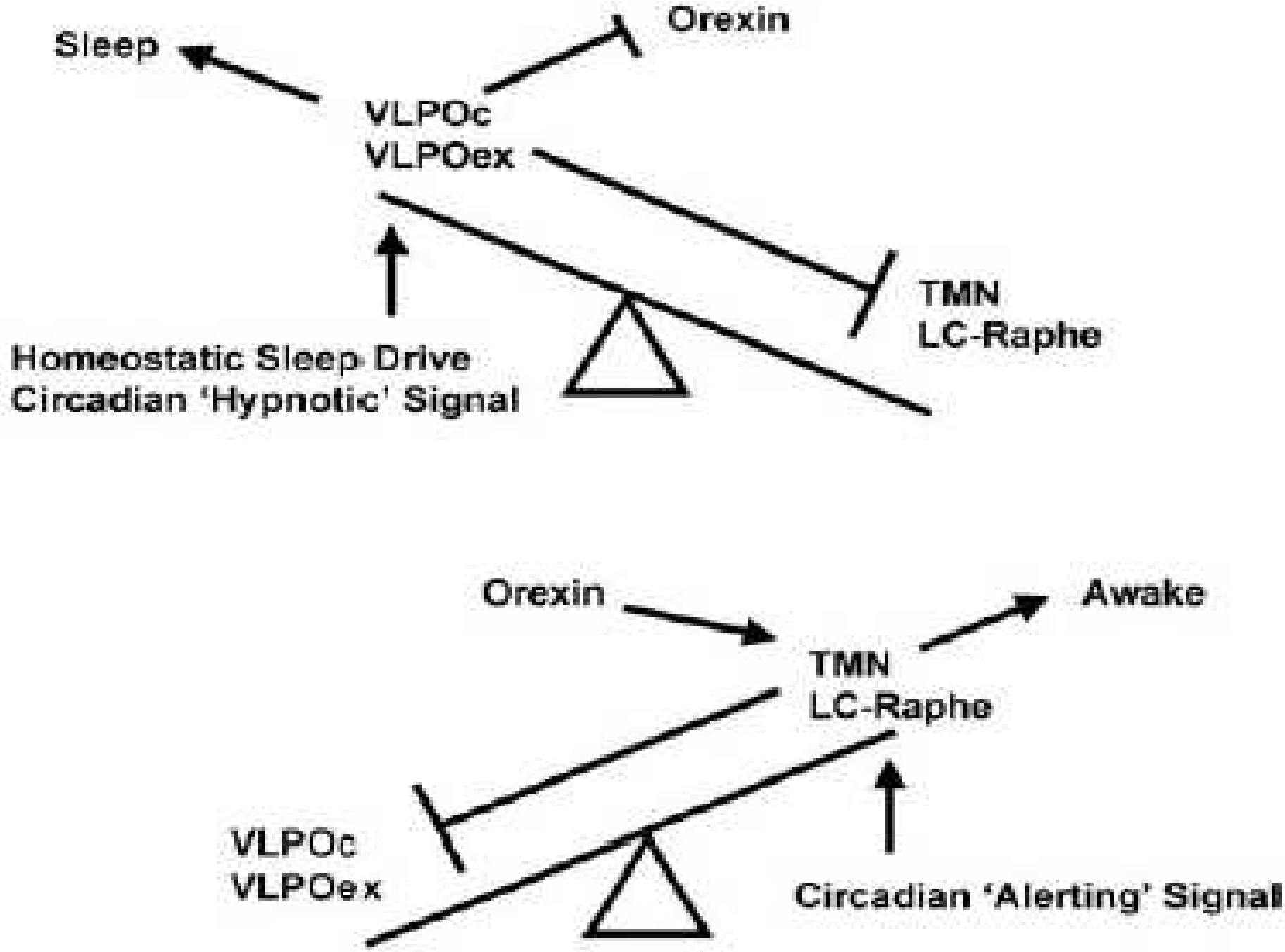
Boston, MA 02215

***Il sonno svolge un'influenza sui livelli di leptina e di grelina: più si dorme, più aumenta la leptina e più diminuisce la grelina e viceversa***

(Spiegel K et al: Ann Intern Med Brief communication: Sleep curtailment in healthy young men is associated with decreased leptin levels, elevated ghrelin levels, and increased hunger and appetite. 2004 Dec 7;141(11):846-50;
TAHERI S et al Short sleep duration is associated with reduced leptin, elevated ghrelin, and increased body mass index. Plos Med 2004 Dec;1(3):e62. Epub 2004 Dec 7)


NPY
+
+
ORESSINA
+ ASSUNZIONE DI CIBO
- TERMOGENESI
ECB
CB1R
NICOTINA
ACH
+
GABA


Sleep
Orexin
VLPOc
VLPOex
TMN
LC-Raphe
Homeostatic Sleep Drive
Circadian 'Hypnotic' Signal
Orexin
Awake
TMN
LC-Raphe
VLPOc
VLPOex
Circadian 'Alerting' Signal

Annals of Internal Medicine | ORIGINAL RESEARCH

# Insufficient Sleep Undermines Dietary Efforts to Reduce Adiposity

Arlet V. Nedeltcheva, MD; Jennifer M. Kilkus, MS; Jacqueline Imperial, RN; Dale A. Schoeller, PhD; and Plamen D. Penev, MD, PhD

**Conclusion:** The amount of human sleep contributes to the maintenance of fat-free body mass at times of decreased energy intake. Lack of sufficient sleep may compromise the efficacy of typical dietary interventions for weight loss and related metabolic risk reduction.

**Primary Funding Source:** National Institutes of Health.

Proc Natl Acad Sci U S A. 2010 Oct 11. [Epub ahead of print]

# Light at night increases body mass by shifting the time of food intake.

Fonken LK, Workman JL, Walton JC, Weil ZM, Morris JS, Haim A, Nelson RJ.

Departments of Neuroscience and Psychology, Ohio State University, Columbus, OH 43210.

Abstract

**I topolini esposti a una luce fioca nelle ore notturne ingrassano il 50% in più rispetto a quelli che seguono il fisiologico ciclo luce/buio, nonostante un apporto e un consumo calorici equivalenti**. La luce **ingrassa**, hanno scoperto gli esperti, perché induce l'animale a mangiare alle ore sbagliate.

PMID: 20937863 [PubMed - as supplied by publisher]

Am J Clin Nutr. 2012 Jul 3. [Epub ahead of print]

# Sleep restriction is not associated with a positive energy balance in adolescent boys.

Klingenberg L, Chaput JP, Holmbäck U, Jennum P, Astrup A, Sjödin A.

Department of Human Nutrition, Faculty of Science, University of Copenhagen, Copenhagen, Denmark.

## Abstract

**BACKGROUND:** A short sleep (SS) duration has been linked to obesity in observational studies. However, experimental evidence of the potential mechanisms of sleep restriction on energy balance is conflicting and, to our knowledge, nonexistent in adolescents.

**OBJECTIVE:** We investigated the effects of 3 consecutive nights of partial sleep deprivation on components of energy balance.

**DESIGN:** In a randomized, crossover design, 21 healthy, normal-weight male adolescents (mean ± SD age: 16.8 ± 1.3 y) completed the following 2 experimental conditions, each for 3 consecutive nights: an SS (4 h/night) and a long sleep (LS; 9 h/night) duration. Endpoints were 24-h energy expenditure (EE), spontaneous physical activity (SPA), postintervention diet-induced thermogenesis (DIT), appetite sensations, ad libitum energy intake (EI), and profiles of plasma ghrelin and leptin.

**RESULTS:** The 24-h EE on day 3 was 370 ± 496 kJ higher in the SS condition than in the LS condition (P = 0.003). This difference in EE was explained by prolonged wakefulness in the SS condition and a 19% higher SPA (P = 0.003). In a postintervention breakfast-meal challenge, there was a 0.19-kJ/min smaller incremental AUC in DIT over 4 h in the SS condition than in the LS condition (P = 0.012) with no time × condition effect (P = 0.29). Subjects consumed 13% less energy in the ad libitum meal in the SS condition (P = 0.031), with a concomitant decreased motivation to eat. Concentrations of ghrelin and leptin remained unchanged with sleep restriction.

**CONCLUSION:** Short-term sleep restriction in male adolescents is associated with a small negative energy balance driven by increased EE from prolonged wakefulness and a concomitant decreased EI and motivation to eat. This trial was registered at clinicaltrials.gov as NCT01198431.

**Ne “La scarpa magica” (1953) Topolino sale su un treno il cui cartellone dice:**

**Partenza: ora**

**Arrivo: forse**