

## Spaniards sit for dinner, while the rest of Europe is ready to go to bed

Should they change their working hours

and habits?

#### **USO DEL TIEMPO POR PAÍSES**



FRANCIA	ALEMANIA	SUECIA	
Dormir	Dormir	Dormir	6.00
Desayuno	Desayuno	Desayuno	7.00
Trabajo	Trabajo	Trabajo	8.00 9.00 10.00 11.00
Comida	Comida	Comida	12.00 13.00
Trabajo	Trabajo	Trabajo	14.00 15.00 16.00
	Cena	Cena	17.00 18.00 19.00
Cena V e Internet	TV e Internet	TV e Internet	20.00 21.00 22.00
Dormir	Dormir	Dormir	23.00

EL PAÍS





## Marina Greenwich, Altea



## Why not GMT?

Franco decided to move Spain to Central European Time in Oct. 1940, in order to be in the same time zone as Germany

The system hasn't been changed since

# Let's mess with the time zones!



### Spain "ugly duckling of neighbourhood"

#### "Spain keeps very strange hours"

José María Fernández-Crehuet, Professor of Economy and Administration, Distance Learning University, Madrid





"We work more hours, with worse results (we are less balance impossible"

José María Fernández-Crehuet, Professor of Economy and Administration, Distance Learning University, Madrid

#### productive). Working hours make work and private life





 "Spaniards start the day very badly. Tired and in a bad mood, because we go to bed very late. On top of that, we don't have breakfast at home, or we have a quick and bad one"

> Based on a study of 27 work-life balance parameters (time, family, health, work and social policies) and compared with neighbouring countries. Data source: Eurostat





earlier.

Instead of eating in the afternoon, we could have lunch at 13:00

In Spain the working day is cut in half, which extends the hours spent at work - and everything gets delayed: leisure and TV prime time

#### From then on, everything gets worse, as we waste an hour mid-morning, which we could use to go home





#### In the past, people in the countryside had lunch between 12:30-13:00

similar climate with different meal times

### Not due to climate, as Greece, Italy and Portugal have a





### Industrialisation and end of WWII

"During the industrialisation, European countries adopted very long and rigidly regimented working days but, at the end of WWII they saw the need to make changes. Spain was under a dictatorship and modernisation didn't happen as in the rest of Europe, that's why Spain still has the least flexible working hours in Europe."

Dr. Social Psychology Sara Berbel

The split day, typical of the Spanish system, was introduced at the time. Men, who were the main breadwinners, had to take on more than one job. A clerk went to the bank 09:00 to 15:00 then worked as an accountant 16:00 to 20:00. That delayed the meal time for the whole family, as everybody had to wait until he came home - and it lasts to this day.

Dr. Social Psychology Sara Berbel

### Why Change?

People working miss out on daylight hours: 46% at work at 18:00 10% still at work at 21:00

Dr. Social Psychology Sara Berbel

### Why Change?

"Good for tourism, as visitors would be less surprised by our chaotic lifestyle"

#### Pr. Fernández-Crehuet

### Benjamin Franklin

the program.

In 1784 French ambassador Ben Franklin sent a letter to the *Journal de Paris* claiming to be astonished, upon being awakened at 6 a.m., to find that the sun was already up. He, and no doubt his readers, had never seen the sun before noon.

Money would be saved if people rose with the sun and turned in earlier at night, replacing hours of expensive candle use with free morning daylight.

Franklin knew there would be opposition and proposed measures including taxes on window shutters, rationing of candle sales enforced by police guards, a halt to non-emergency coach traffic after dark, and the firing of cannons in every street to get "sluggards" with the program.



## Meanwhile, in Mother Russia...



History suggests the popular mnemonic "spring forward, fall back" may not translate well into the Russian language.

Stalin changed the clocks in the spring of 1930. He forced all of the Soviet Union onto daylight saving time. In October he forgot to tell the Soviets to fall back. The clocks in every Russian time zone were off by an hour for 61 years, until 1991.



### Spain: GMT and DST or not?

#### Saving of 300 m € - Ministry of Industry

Drowsiness cause of accidents
Increased risk of heart attack (alarm clock!)

We report the relationship between patterns of post-awakening salivary melatonin and cortisol secretion in healthy participants (n = 51; mean age 21.6  $\pm$  5.0 years). Saliva samples were collected within the domestic setting, at 0-, 15-, 30-, and 45-min postawakening on 2 consecutive typical weekdays. Analyses were undertaken on data with electronically verified sample timing accuracy (<5-min delay between awakening and the start of saliva sampling). Melatonin secretion declined linearly by an average of 29% within the first 45-min post-awakening. In contrast, there was a marked 112% surge in cortisol, characteristic of the cortisol awakening response. No day differences in melatonin or cortisol secretion were observed but melatonin concentrations were lower with later awakening. Despite contrasting post-awakening changes in these hormones, there was a lack of relationship between overall levels or patterns of melatonin and cortisol during this period.

Translation: We are grumpy and stressed when we wake up early. And it lasts all day.



**Relationship between post-awakening** salivary cortisol and melatonin secretion in healthy participants

