

# Agility: Possibilities at a Personal Level



**Linda Rising**

**[linda@lindarising.org](mailto:linda@lindarising.org)**

**[www.lindarising.org](http://www.lindarising.org)**



## Coffee, tea, or cola?

- **The most popular drinks in the world.**
- **Different taste and smell, but all contain significant amounts of caffeine.**
- **Plants containing caffeine existed in Paleolithic times (early as 700,000 BCE)**
- **Our Stone Age ancestors chewed seeds, roots, bark, leaves or ground them with tools.**
- **But not until recently did this drug play a significant role in our development.**



# The Industrial Age

- **A surge in economic growth—occurred first in England around 1800**
- **Giant career move to long hours as a factory worker**
- **There were many elements that played an important role in this upheaval....**



# Clocks!

- **During medieval times, schedules were lax, holidays many, disorganization pervasive.**
- **And no accurate timepieces.**
- **Galileo, 1583, discovered the uniformity of pendulum motion**
- **But it took over 100 years for practical application and widespread use.**



# Serendipity!

- **Improvement in precision timepieces happened at the same time that caffeine use appeared.**
- **Stimulant use became necessary to meet schedule demands.**
- **The combination of the clock and caffeine was essential to the development of modern civilization.**



## **Beer for Breakfast**

**Heat beer in a saucepan.**

**In a separate small pot beat a couple of eggs.**

**Add a chunk of butter to the hot beer. Stir in some cool beer, then pour over the eggs.**

**Add a bit of salt, and mix all ingredients, whisking well to keep it from curdling.**

**Bon appetit ☺!**

**Europeans averaged ~3 l beer/person/day**



## **Words from an ancient sage**

- **In wine there is wisdom.**
- **In beer there is freedom.**
- **In water there is bacteria.**



# Caffeine for Breakfast

- **Boil water to make a cup of coffee or tea.**
- **Decreased incidence of disease in crowded cities.**
- **Coffee and tea, clocks, and the first factories appeared at the same time.**
- **Caffeine facilitated the great transformation of human economic endeavor that started the Industrial Age.**





# Confluence of Inventions

- **For most of human existence, sleep and wakefulness was determined by the sun and the seasons.**
- **The inventions of the clock and the availability of caffeine changed lives.**
- **We now had to adapt and cope with a work schedule set by a clock, not by daylight or the natural sleep cycle.**



## Caffeine in the Body

- **Moves easily from stomach and intestines to the bloodstream, to the organs, and almost every cell of the body.**
- **Crosses the blood-brain barrier, reaches its peak concentration in the brain in ~ 1 hr.**
- **Blocks the effect of adenosine (one of the body's natural sleeping pills) and keeps us awake.**



## **Rates of Metabolism**

- **Concentration of caffeine a function of body weight**
- **250-pound man + 1 c coffee (100 mg caffeine) - max caffeine concentration 1 mg/kg body wt.**
- **125-pound woman + 1 c coffee - max caffeine concentration 2 mg/kg body weight**
- **Half-life of caffeine in adults ~3.5 hrs**
- **Women on the Pill ~5.5 hrs**
- **Pregnant women ~10 hrs**



## Caffeine in Babies

- Fetus/newborn unable to metabolize caffeine
- Most babies in the developed world born with traces of caffeine in their bodies
- Half-life in infants ~100 hrs
- Infant's half-life gradually decreases
- But not fully mature until ~1 yr



## **Caffeine + Nicotine**

**Nicotine moderates mood, extends attention,  
doubles the rate of caffeine metabolism.**

**The original coffeehouse was a place where men  
could sit and smoke and drink.**

**The tobacco they smoked made it possible to  
drink coffee all day. The coffee they drank  
inspired them to talk all day.**

**Out of this came the Enlightenment ☺!**



## **The Downside**

**We take control from our hardwired circadian rhythm.**

**But we pay a heavy price for extra wakefulness.**

**Without adequate sleep, we are not at our best, physically, mentally, or emotionally.**

**We have come to believe that sleep is a waste of time and makes us overall less productive.**

**As a result, we are sleep deprived and our brains show visible signs of premature aging.**

# And our Children?

THE SATURDAY EVENING POST



65 **MY HAT'S OFF to**  
*the pause that refreshes*"

Old Santa, busiest man in the world, takes time out for the pause that refreshes with ice-cold Coca-Cola. He even knows how to be good to himself. And so he always comes up smiling. So can you. Wherever you go shopping, you find a cheerful soda fountain with ice-cold Coca-Cola ready.

LISTEN IN  
Grandstand Race—*Various Sports Champions*—*Coca-Cola Orchestra*  
Every Wed. 10:30 p. m.  
Eastern Standard Time.  
Coast-to-Coast  
NBC Network.

The Coca-Cola Co., Atlanta, Ga.

OVER NINE MILLION A DAY . . . IT HAD TO BE GOOD TO GET WHERE IT IS

# A Jolt of Caffeine





# High Energy!





## **And Now?**

**~90 % of us consume caffeine every day.**

**More than half of all adults consume more than 300 mg of caffeine every day, making it our most popular drug.**

**Caffeine remains the only pharmacologically active ingredient in beverages dispensed from vending machines, soda fountains, and grocery stores.**

**It is easily available to all, especially to children.**



## **Caffeine no Better than Breaks**

**Caffeine improves “vigilance tasks” - prolonged attention, little physical activity.**

**Effects most apparent after long effort.**

**When allowed to take breaks no significant benefit from caffeine.**

**Good night’s sleep improves performance, mood, alertness better than caffeine and benefits last longer.**

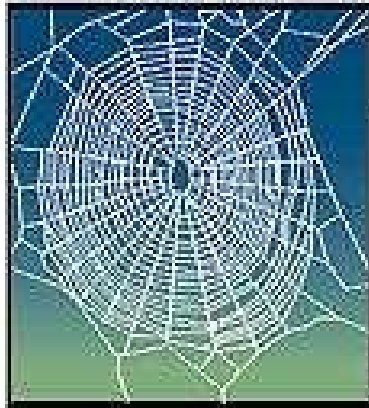


## **Introverts vs. Extroverts**

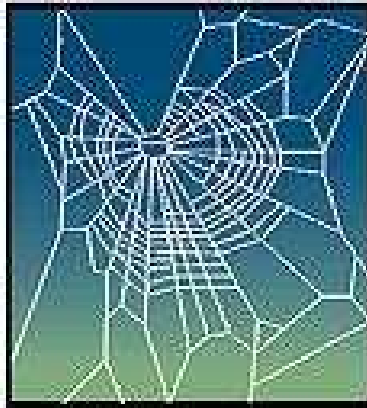
**For simple tasks, everyone tended to do better when given caffeine.**

**On complex tasks, extroverts' performance tended to improve, while introverts tended to get worse.**

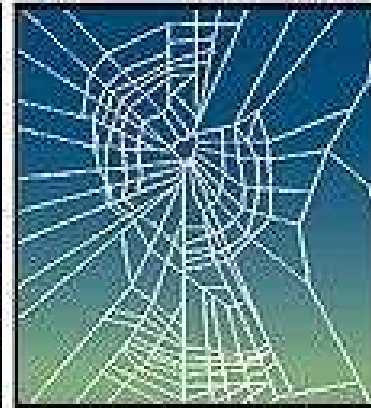
# Spiders on Drugs



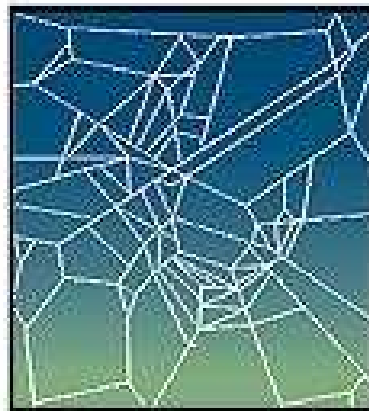
**Normal (no chemical)**



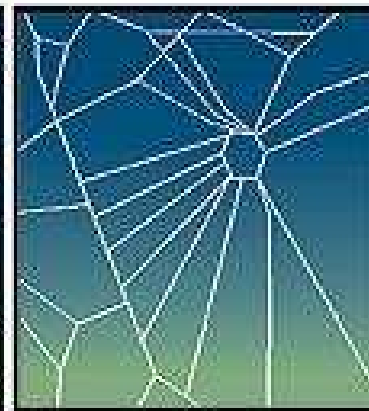
**Marijuana**



**Benzedrine**



**Caffeine**



**Chloral Hydrate**



# Drug Monitoring

- **NCAA restricts caffeine**
- **NASA monitors caffeine, astronauts get rest and “cycle adjustment” before flight**
- **During flight – caffeine + naps**
- **WADA (World Anti-Doping Agency) removed caffeine from banned substances but continues to monitor**
- **Cyclists – placebo effect?**



# **The Trouble with Caffeine Experiments**

**Creating a control group is difficult because nearly everyone is “on” caffeine**

**Withholding caffeine puts the control group at a disadvantage. Stopping caffeine use has been shown to impair performance.**

**Perhaps the results that show improved performance are really showing the effects of caffeine withdrawal?**



## Is agile the new “caffeine”?

- Energizing
- Stimulating
- Fun
- Addictive
- ...





## **No side effects?**

- **Irritable**
- **Restless**
- **Anxious**
- **Sleepless**



**And...**

**Agile teams can get themselves into hot  
water 😊!**

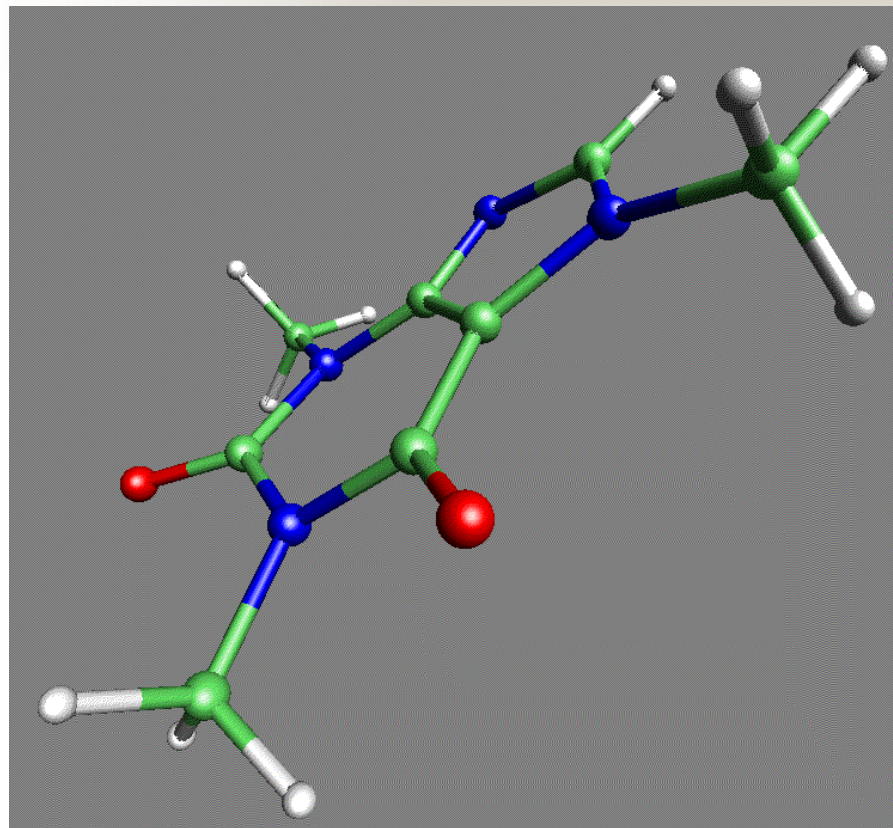


## **Good for teams? Good for us?**

**Is it possible to apply an approach that works well for teams to our own lives?**

**It seems that we assume that what was good in the Industrial Age must be good for us now.**

**Perhaps we should be experimenting, learning, working toward the goal of living our lives in the best possible way.**



**No answers, just questions.  
Thanks for listening!**