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Mass Caffeination

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Mass Caffeination

Abstract
This poem reflects on caffeine intake in modern society from the perspective of a pharmacologist. It is a free verse, concrete poem that communicates the science of caffeine through both words and visual images.

Author/Artist Bio
Michael J Leach is a statistician, health researcher, and poet with a PhD in Pharmacy and a keen interest in STEAM. Michael works at the Loddon Mallee Integrated Cancer Service, Bendigo Health and undertakes research through Monash University School of Rural Health. His poems have appeared in medical journals, including the Medical Journal of Australia and Medical Humanities, as well as literary journals, including Cordite Poetry Review and Meniscus Literary Journal. He lives in his hometown of Bendigo, Australia.

Keywords
Pharmacology, pharmacodynamics, botany, caffeine, poetry

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Here in this open-air sanctuary of societal approval, we observe or partake in the mass consumption of a certain readily available psychostimulant.

Our daily routines feature the regular infusion and dissolution of certain botanicals into hot water, giving bitter brews that one may choose to sweeten (naturally or otherwise).

When one consumes the aromatic tea of Southwest China/cocoa of Central America/coffee of Northeast Africa, one is in fact casually taking a non-prescription drug: a xanthine called caffeine. So it may pay
for us to know something
of caffeine’s pharmacodynamics.

After absorbing
thru the small intestine,
flowing in the blood
stretches and crossing
the blood-------------------brain barrier,
the

    C
C     Y

I     C

molecules of caffeine
bind to adenosine receptors in the brain.
This process, known as antagonism,
prevents adenosine (an endogenous protein)
from locking into its binding sites and eliciting
its natural effect – CNS depression.
Thus,
at approximately
an hour post-consumption,
the caffeine reaches
sufficiently high
blood plasma concentrations
to effectively
fight fatigue
and focus the faculties.

We can take a
pharmacological view
of coffee/cocoa/tea
as, essentially, just a vehicle
for a popular chemical –
that dependable xanthine
that gives a welcome buzz.

We’re as free
as cathemeral owls
to reap the benefits
of one of the few
legally non-prescription
performance-enhancing drugs.