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Mass Caffeination

Michael J. Leach Monash University

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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.

Keywords

Pharmacology, pharmacodynamics, botany, caffeine, poetry

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Mass Caffeination

Michael J. Leach

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

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and crossing

the blood-----brain barrier,

the

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C Y

I C

L

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.