

NICOTINE ADDICTION

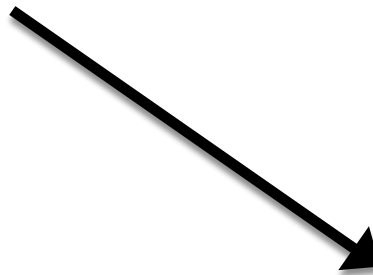
Jimmy Martin

UCLA '13





47-23687328 [RM:] © www.visualphotos.com



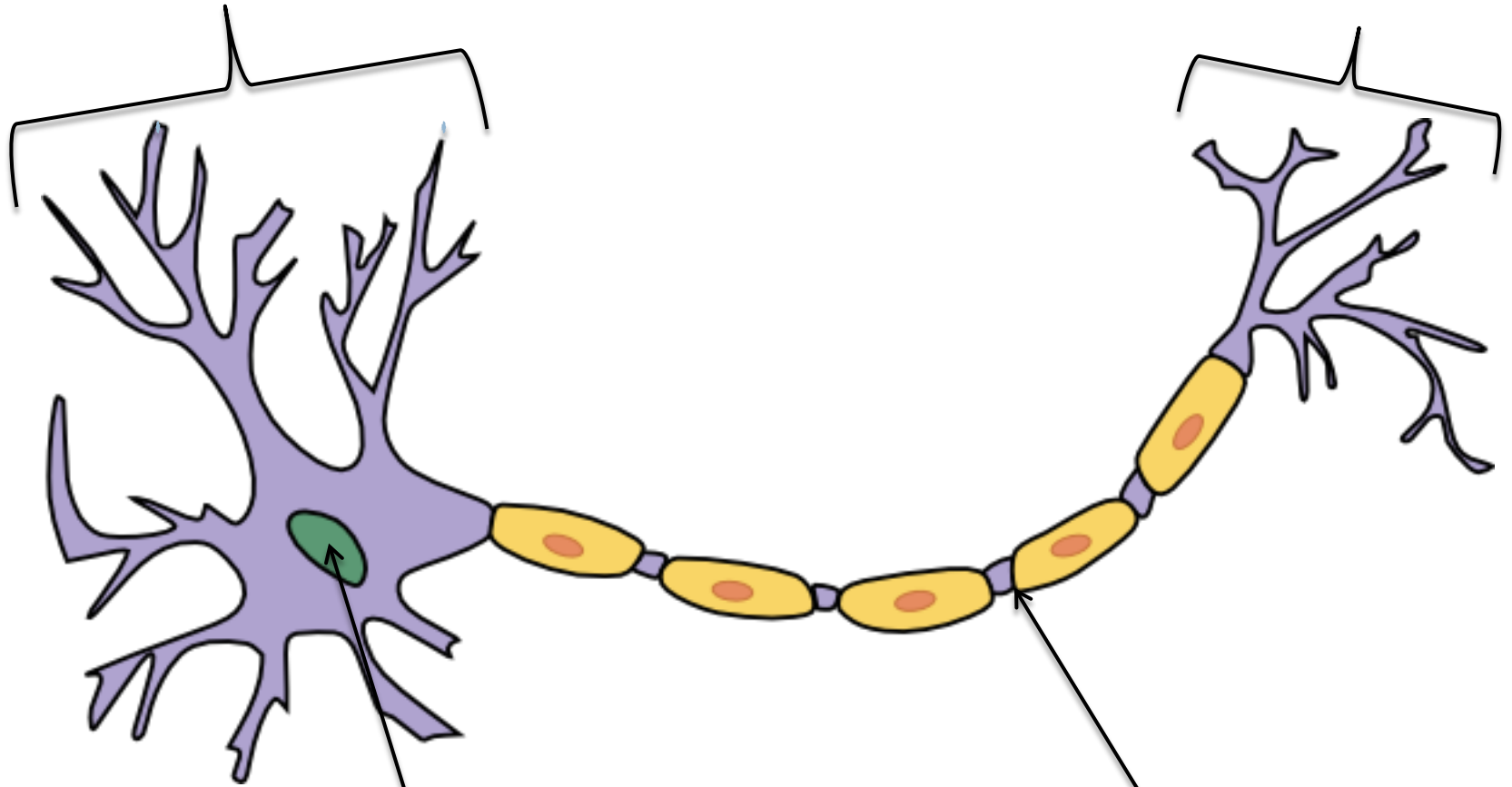
Addiction (n) : a condition of compulsive drug seeking and use, even in the face of negative consequences



NEURON

Dendrites

Axon Terminals



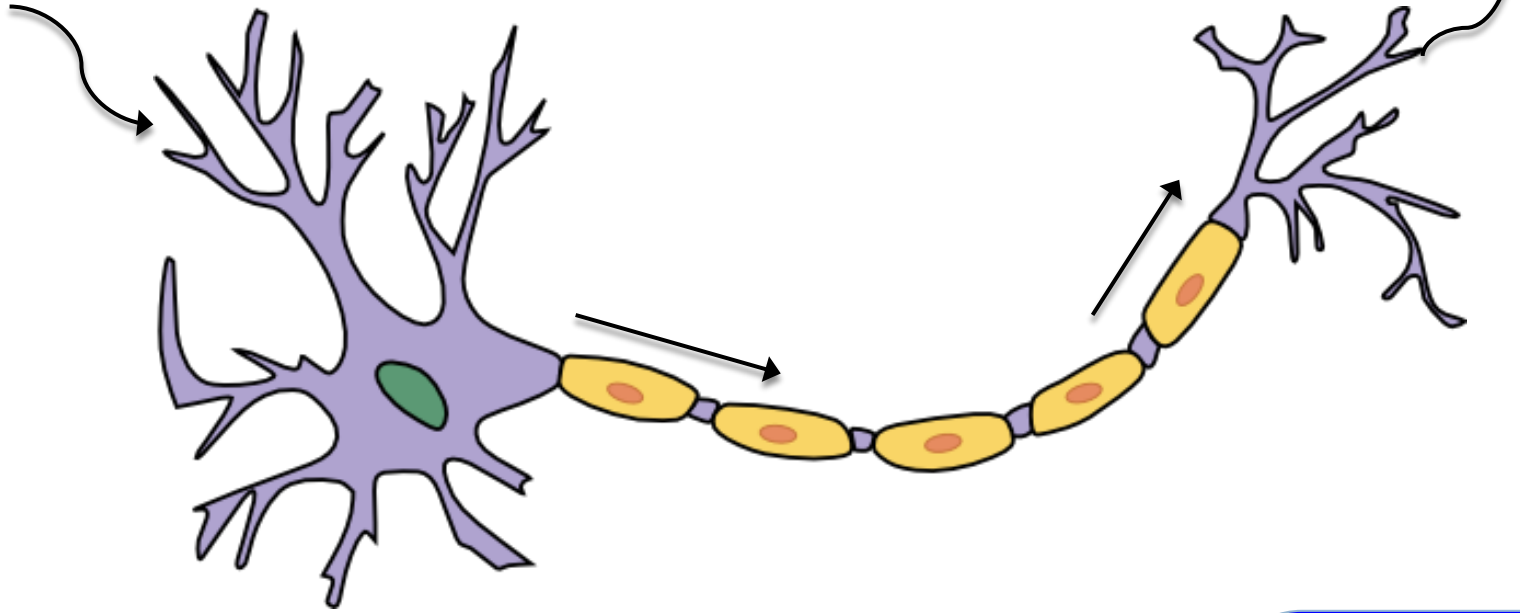
Cell Body
(Soma)

Axon

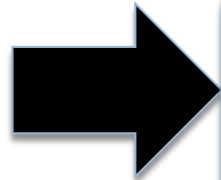
NEURON

Information from other neurons

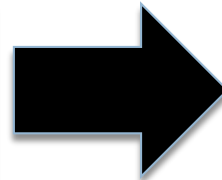
Information passed to other neurons



Dendrites receive signals from other neurons

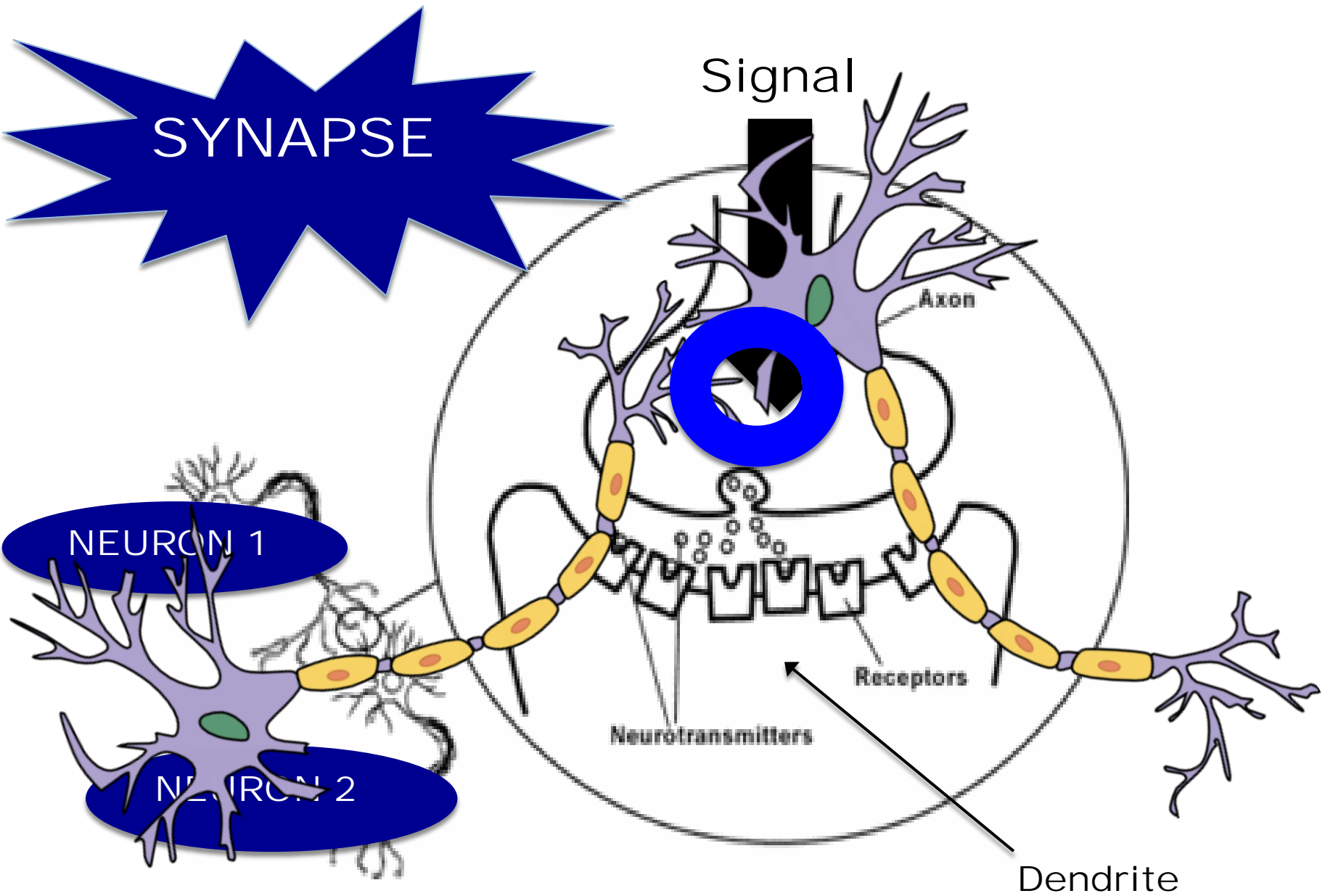


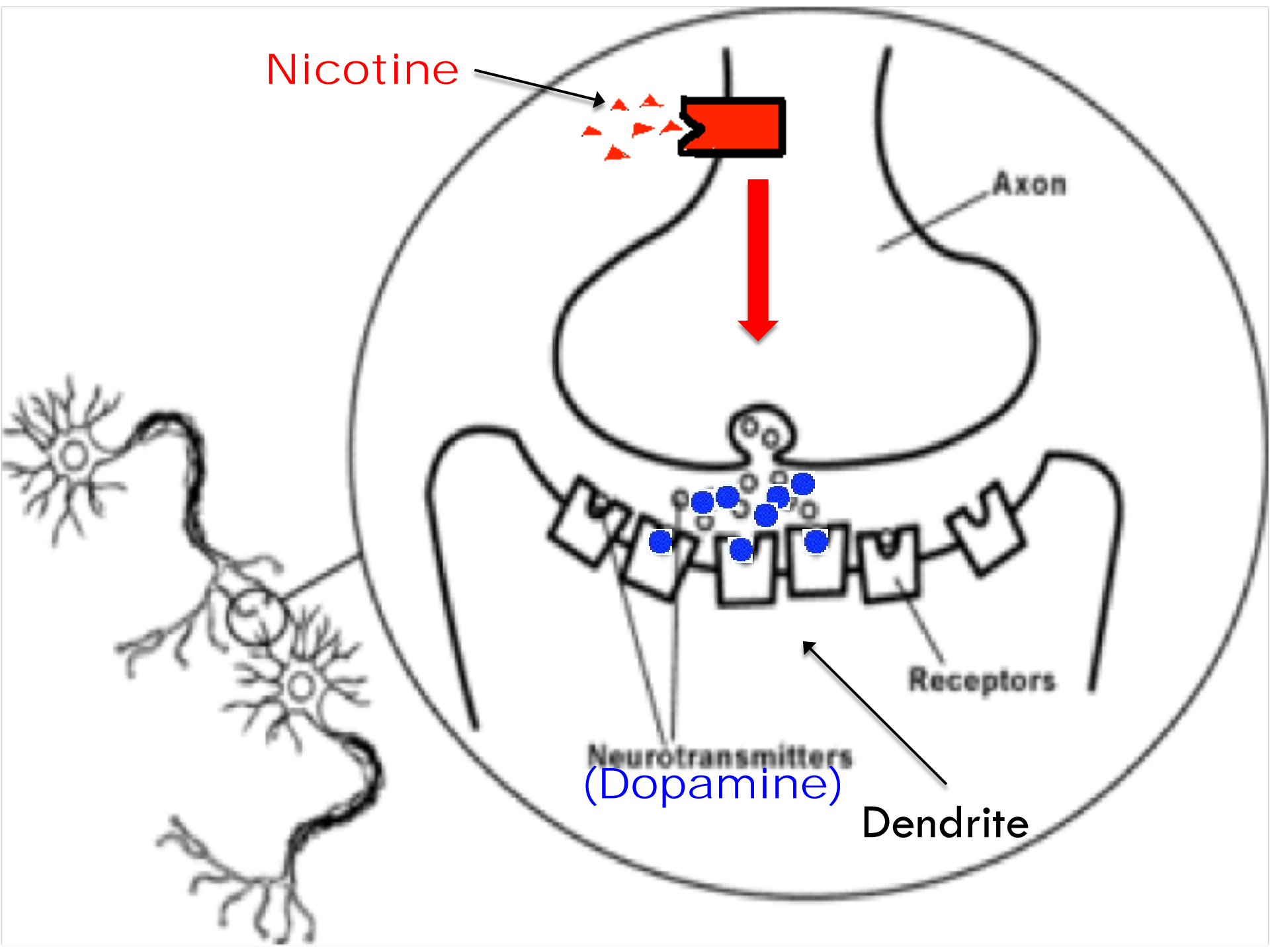
Cell Body integrates the signals



Axon transmits signal to dendrites of other neurons

SYNAPSE

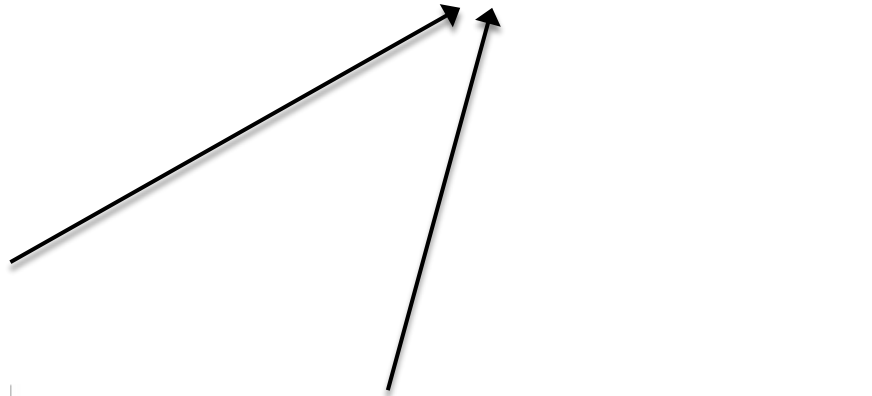


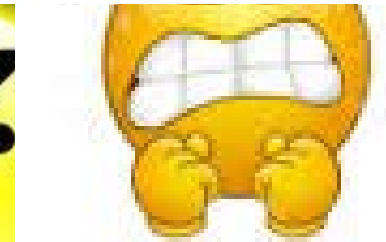




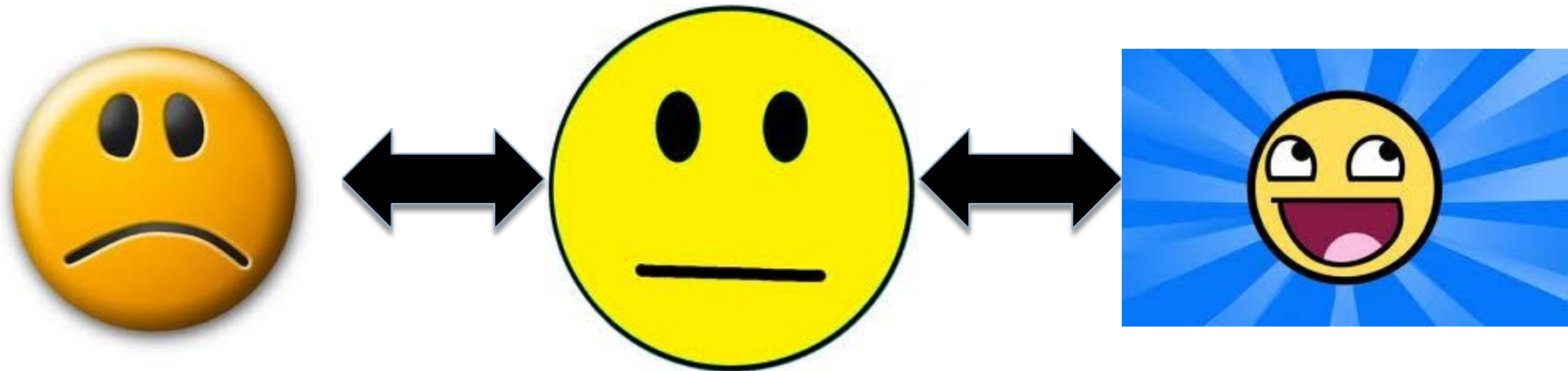
Release of Dopamine

Natural
reward



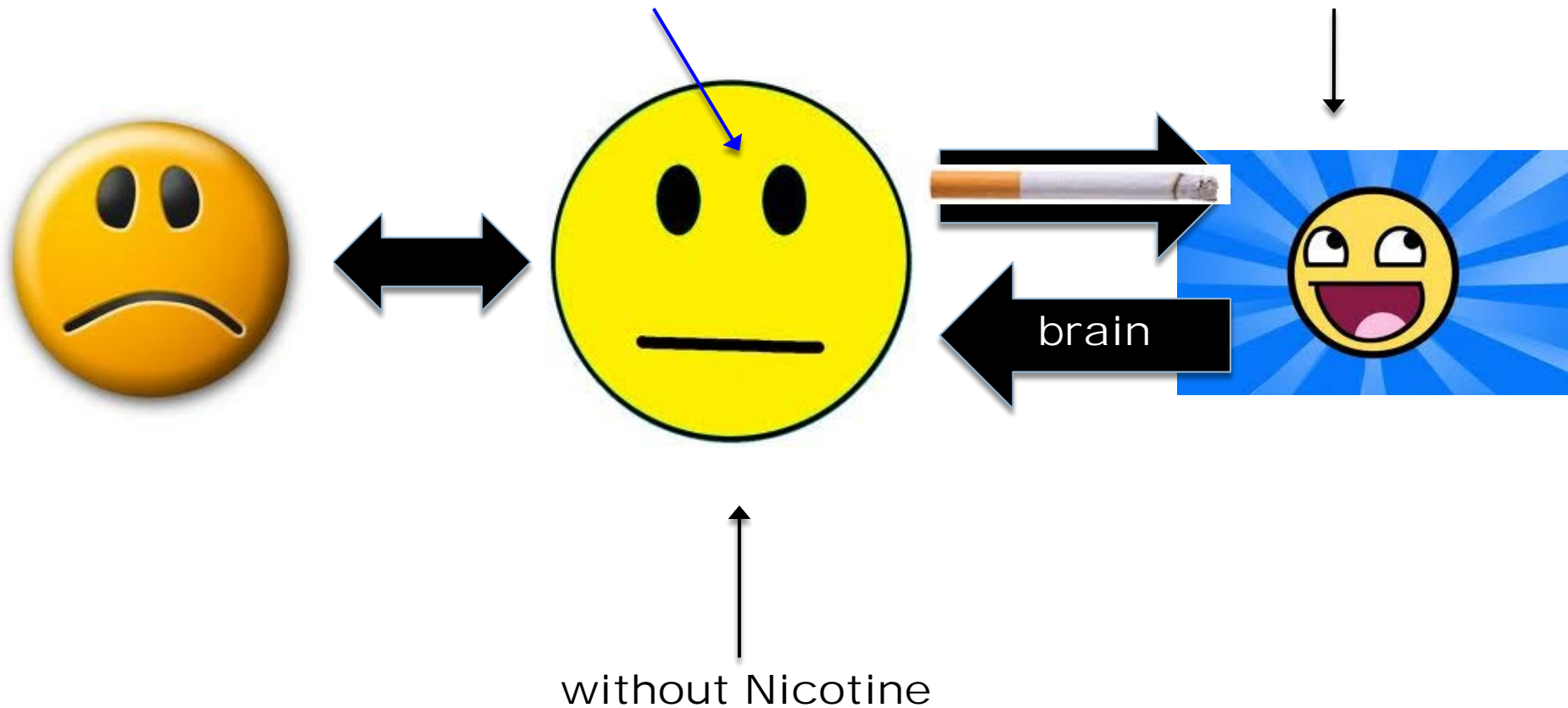


Normal



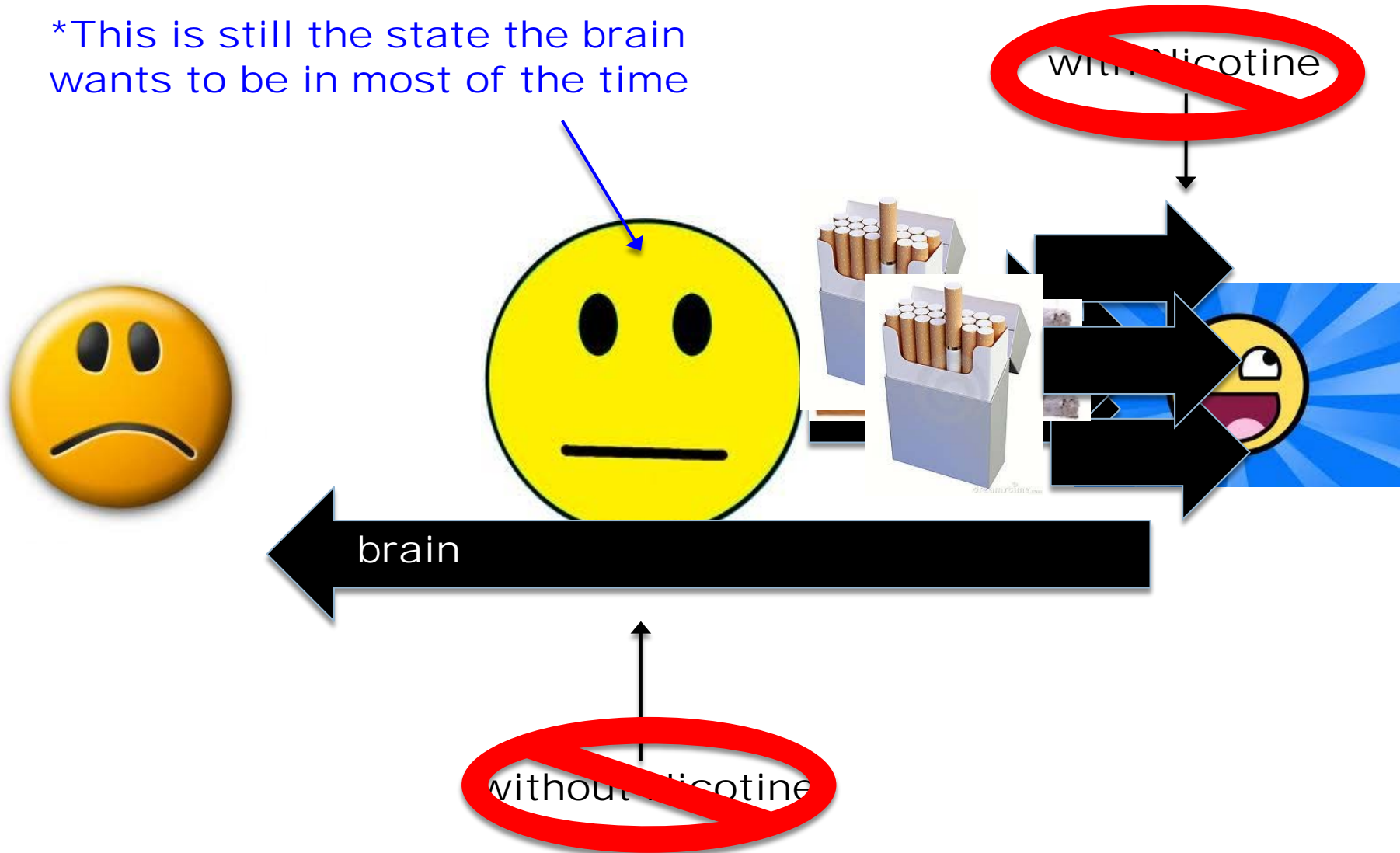
Initial use

*This is the state the brain wants to be in most of the time

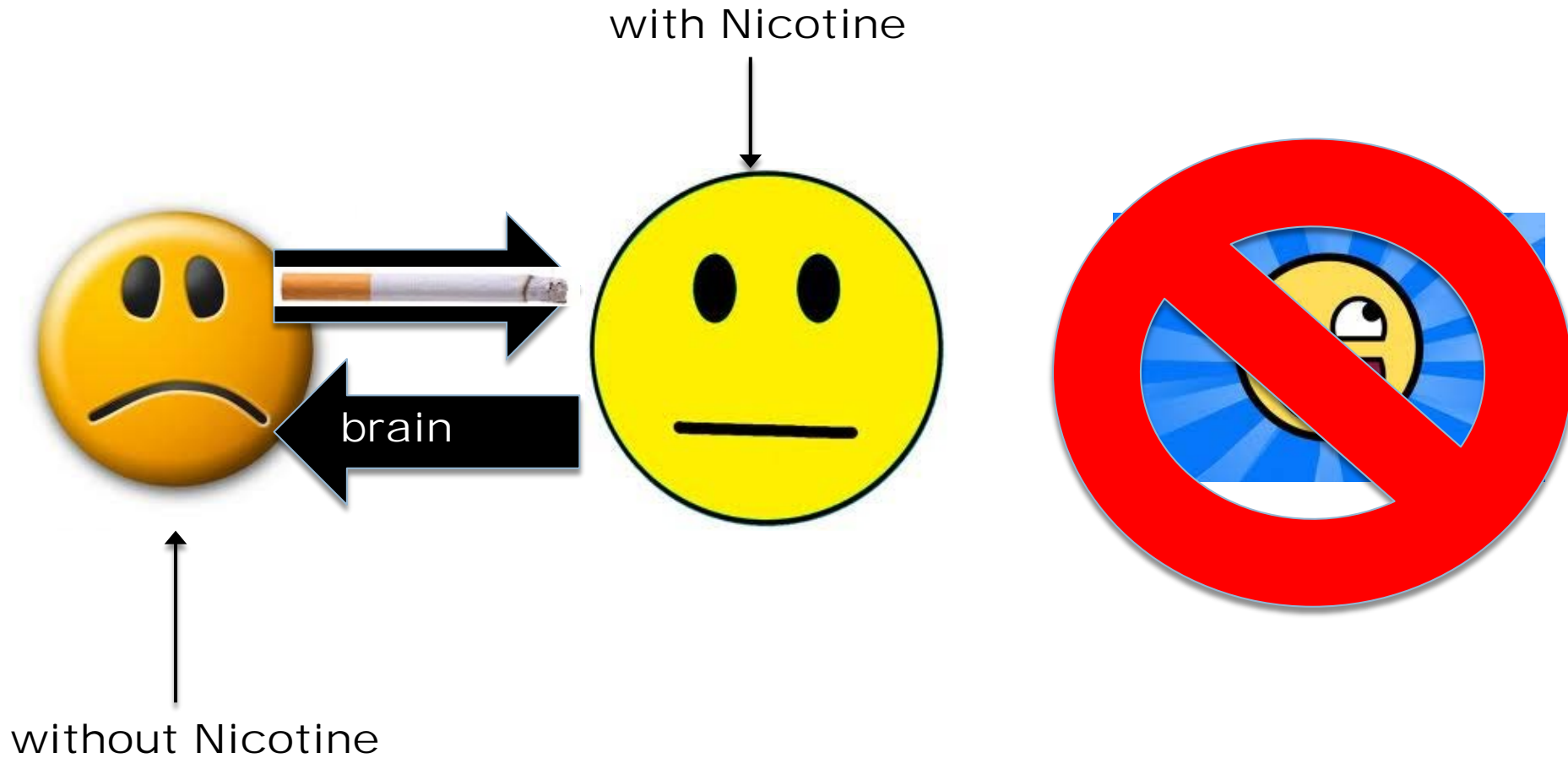


Long-term use

*This is still the state the brain wants to be in most of the time



Long-term use





Major health problem in US

- More deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined
- Cigarette smoking is responsible for 1 in every 5 US deaths



Normal Lung



Smoker's Lung

Treatment

- The health benefits of smoking cessation are immediate and substantial -> reduced risk for cancers, heart disease, and stroke; increased life expectancy





It's drug addiction.