

The logo features a dark blue speech bubble shape on a light beige background with faint concentric circles. Inside the bubble, the word "Mellow" is in white serif font, "Academy" is in red script font, and "Training" is in white sans-serif font below it.

MellowAcademy

Training

# Aroma Therapy

## Course Description

This course is designed to add to the existing aromatherapy knowledge of practitioners to further the benefit of our patients.

We will learn about the benefits of the most common essential oils, and in which manner they are most easily applied and most helpful.

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# Learning Outcomes

## Upon Successful Completion of this course;

- Students will gain a better understanding of how to appropriately apply essential oils in a treatment
- Each participant will learn how essential oils affect the brain
- Students will learn about the benefits of most common oils used in spas or clinical settings
- Participants will go through a refresher on basic anatomy of the human brain

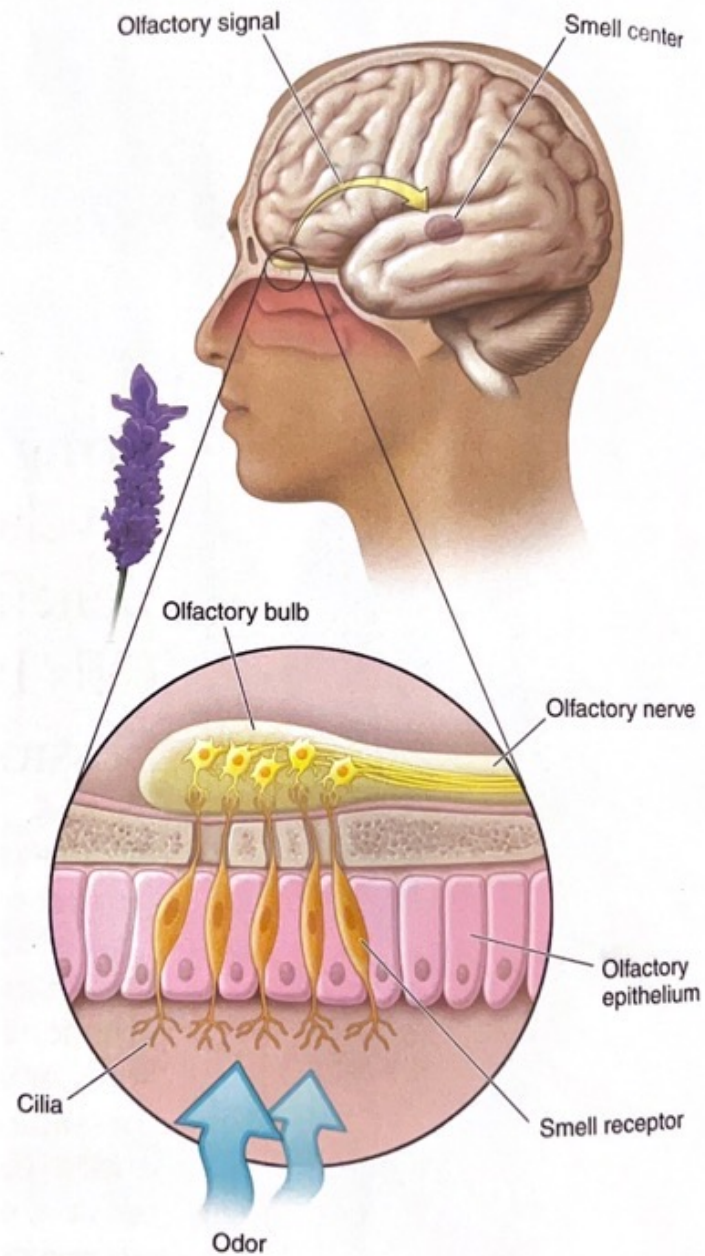
# The Human Brain





# Mechanisms of the Brain

- Smell, the earliest of senses in our ancestors, occurs when a mucus-covered patch of tissue called the *Olfactory Epithelium* contacts particulate from inhalation or mastication.
- 3-4 centimeters wide, the *Olfactory Epithelium* has more than 100 million receptor cells of which there are 400-450 different types of receptors specifically designed for particular aromas which allows us to differentiate nearly 1 trillion different types.
- Neurons from the olfactory receptors bundle together to form the *Olfactory Nerve* which travel to the *Olfactory Bulb*, to the Limbic System, triggering structures responsible for adrenal flow, emotion, behavior, motivation, long-term memory, & olfaction.
- The Amygdala, as part of the Limbic system, is responsible for integrating emotion, behavior, etc.,.
- The Hypothalamus links the nervous system to the endocrine system by way of the pituitary gland, which triggers the brain to start or stop the production of hormones.



Olfaction:



# Amygdala Soothing

- Almond shaped, these sets of neurons located in the medial temporal lobe are associated with fear responses, and pleasure.
- Anxiety, autism, depression, PTSD, and phobias correspond to abnormal functioning in this region of the brain.
- This part of the brain is responsible for the Fight or flight response.
- Valerian, Lavender, Bergamot, & Rose are the most effective at reducing hypervigilance in an overactive amygdala





## Antidepressants

- Essential Oils with counter effects can reduce non-clinical depression with symptoms of sadness, fear, hopelessness, emotional fatigue and dejection.





# Neurosedatives

- Neurosedatives act on the brain by increasing Gamma-Aminobutyric Acid (GABA) levels, triggering their matched receptors, thereby inhibiting excitatory neurotransmitters.
- When GABA levels are high, we feel sleepy, and relaxed; visually tranquilized in the eyes of others.

# Neurostimulants

- By stimulating the CNS, a sense of alertness is produced causing an increase in cerebral blood flow, beta wave activity, and stimulating the Locus Coeruleus (section of the brain associated with the production of norepinephrine).
- These also block GABA receptors.
- Norepinephrine helps us focus attention, increase alertness, & promotes forming memories and also retrieving them.
- High levels of this is associated with the fight or flight response system.
- Some Neurostimulants block receptor sites for GABA, reducing GABA activity and improves alertness and attention.



# Dopamine Balancers

- Dopamine is the brain's reward system, where behaviors associated with biological advantages bring a sense of gratification.
- Drugs like nicotine, amphetamines, and activities like eating and coitus induce the production of dopamine.
- Dopamine plays a major role in motor activity, mood, sensations of well-being, sleep patterns, attention allocation, & learning.

## Serotonin Stimulants

- serotonin is associated with mood, sleep, sexuality, & appetite, but low serotonin levels are associated with depression, anger, aggression, anxiety, and OCD. Moreover, it may also be linked to migraines and Fibromyalgia.

# Euphorics

- Agents that promote positive feeling of expansion, connection, and consciousness. This occurs by way of an increase of activity in the prefrontal cortex, but also on some types of serotonin receptors.
- Euphorics sedate the amygdala and Thalmus, which regulate pleasure, fear, sleep, alertness, and wakefulness.

Amyris	<i>Amyris balsamifera</i> L.	Neurosedative
Atlas cedarwood	<i>Cedrus atlantica</i> (Endl.) Manetti ex Carrière	Neurosedative; balances serotonin
Basil	<i>Ocimum basilicum</i> L.	Antidepressant; increases dopamine
Bay laurel	<i>Laurus nobilis</i> L.	Neurostimulant; increases dopamine
Bergamot	<i>Citrus bergamia</i> Risso (unresolved)	Antidepressant; increases dopamine; balances serotonin; euphoric
Bitter orange	<i>Citrus × aurantium</i> L.	Neurosedative
Black pepper	<i>Piper nigrum</i> L.	Neurostimulant
Blue lotus	<i>Nymphaea nouchali</i> var. <i>caerulea</i> (Savigny) Verdc.	Euphoric
Cardamom	<i>Elettaria cardamomum</i> (L.) Maton	Euphoric
Clary sage	<i>Salvia sclarea</i> L.	Antidepressant; increases dopamine; balances serotonin; euphoric
Clove bud	<i>Syzygium aromaticum</i> (L.) Merr. & L.M. Perry	Euphoric
Coriander	<i>Coriandrum sativum</i> L.	Neurostimulant
Cypress	<i>Cupressus sempervirens</i> L.	Euphoric
Eucalyptus	<i>Eucalyptus globulus</i> Labill.	Neurostimulant
Frankincense	<i>Boswellia sacra</i> Flueck. (formerly <i>B. carteri</i> Birdw.)	Antidepressant; euphoric
Geranium	<i>Pelargonium graveolens</i> L'Hér.	Antidepressant
German chamomile	<i>Matricaria chamomilla</i> L. (formerly <i>M. recutita</i> L.)	Neurosedative
Ginger	<i>Zingiber officinale</i> Roscoe	Euphoric
Grapefruit	<i>Citrus paradisi</i> Macfad.	Antidepressant; neurostimulant; euphoric
Helichrysum	<i>Helichrysum italicum</i> (Roth) G. Don.	Neurosedative; euphoric
Hops	<i>Humulus lupulus</i> L.	Neurosedative
Hyssop	<i>Hyssopus officinalis</i> L.	Neurosedative
Jasmine (Italian)	<i>Jasminum grandiflorum</i> L.	Antidepressant; neurostimulant; euphoric
Lavender	<i>Lavandula angustifolia</i> Mill.	Reduce amygdala overactivity; neurosedative; increases dopamine; balances serotonin
Lemon	<i>Citrus limon</i> (L.) Osbeck	Neurostimulant; increases dopamine; balances serotonin
Lemongrass	<i>Cymbopogon citratus</i> (DC.) Stapf	Neurosedative
Linden flower	<i>Tilia × europaea</i> L.	Neurosedative
Mandarin	<i>Citrus reticulata</i> Blanco	Antidepressant; neurosedative
Melissa	<i>Melissa officinalis</i> L.	Antidepressant; neurosedative; increases dopamine
Neroli	<i>Citrus × aurantium</i> L.	Antidepressant; neurosedative; euphoric
Nutmeg	<i>Myristica fragrans</i> Houtt.	Euphoric
Peppermint	<i>Mentha × piperita</i> L.	Neurostimulant
Pettigrain	<i>Citrus × aurantium</i> L.	Antidepressant
Roman chamomile	<i>Chamaemelum nobile</i> (L.) Ait.	Neurosedative; balances serotonin
Rose (Damask)	<i>Rosa × damascena</i> Herrm.	Reduce amygdala overactivity; antidepressant; neurosedative; balances serotonin
Rosemary	<i>Rosmarinus officinalis</i> L.	Neurostimulant; euphoric
Sandalwood	<i>Santalum album</i> L.	Neurosedative; balances serotonin
Spikenard	<i>Nardostachys jatamansi</i> (D. Don) DC.	Neurosedative
Sweet fennel	<i>Foeniculum vulgare</i> Mill.	Neurostimulant
Sweet marjoram	<i>Origanum majorana</i> L.	Antidepressant; neurosedative
Sweet orange	<i>Citrus sinensis</i> (L.) Osbeck	Antidepressant; balances serotonin
Tarragon	<i>Artemisia dracunculus</i> L.	Neurostimulant
Thyme	<i>Thymus vulgaris</i> L.	Neurostimulant
Valerian	<i>Valeriana fourieri</i> Briq.	Reduce amygdala overactivity; neurosedative
Ylang-ylang	<i>Cananga odorata</i> (Lam.) Hook. f. & Thomson	Antidepressant