

# Pelatihan Herbal dan Aromaterapi untuk Mahasiswa STIKES ISFI Banjarmasin

Hardi Astuti Witasari

16 Oktober 2024

## Major Essential Oils of Indonesia

No.	Commercial Name	Plant Source	Common Indonesian Name	Application/Benefit
1	Agarwood oil	<i>Aquilaria sp</i>	Gaharu	Perfumery, cosmetics, pharmaceutical
2	Bangle oil	<i>Zingiber cassumunar</i>	Bangle	Pharmaceutical
3	Basil oil	<i>Ocimum basilicum</i>	Kemangi	Pharmaceutical, food, bio pesticide
		<i>Ocimum gratissimum</i>	Selasih mekah	Pharmaceutical, food
4	Black pepper oil	<i>Piper nigrum</i>	Lada	Flavoring, antimicrobial
5	Cajuput oil	<i>Melaleuca leucadendron</i>	Kayuputih	Pharmaceutical
6	Calamus oil	<i>Acarus calamus</i>	Jeringau	Pharmaceutical
7	Cananga oil	<i>Canangium odoratum</i>	Kenanga	Aromatherapy, perfumery, cosmetics
8	Cardamon oil	<i>Amomum cardamomum</i>	Kapulaga	Pharmaceutical
9	Celery oil	<i>Apium graveolens</i>	Seledri	Flavoring, pharmaceutical
10	Cinnamon bark oil	<i>Cinnamomum casea</i>	Kayumanis	Flavoring
11	Citronella oil	<i>Cymbopogon nardus</i>	Sereh wangi	Flavoring, perfumery, soap
12	Clausena/Anis oil	<i>Clausena anisata</i>	Clausena	Pharmaceutical, beverages, perfumery, cigarette, chewing gums, tooth paste
13	Clove oil	<i>Syzgium aromaticum</i>	Cengkih	Flavoring, perfumery, cigarette
14	Coriander oil	<i>Coriandrum sativum</i>	Ketumbar	Food and pharmaceutical
15	Cornmint oil	<i>Mentha arvensis</i>	Permen	Flavoring, perfumery, tooth paste, candy
16	Cubeb oil	<i>Piper cubeba</i>	Kemukus	Food, beverages, flavoring, soap, detergent, perfumery, pharmaceutical

17	Curcuma oil	<i>Curcuma domestica</i>	Kunyit	Flavoring, pharmaceutical
		<i>Curcuma xanthorrhiza</i>	Temulawak	Pharmaceutical, beverages
18	Fennel oil	<i>Foeniculum vulgare</i>	Adas	Flavoring, soap, cosmetics, perfumery, pharmaceutical
19	Ginger oil	<i>Zingiber officinale</i>	Jahe	Flavoring, pharmaceutical
20	Jasmine oil	<i>Jasminum sambac</i>	Melati	Perfumery, aromatherapy, cosmetics
21	Kaempferia oil	<i>Kaempferia galanga</i>	Kencur	Pharmaceutical
22	Lajagua oil	<i>Alpinia malaccensis</i>	Lajagua	Pharmaceutical
23	Lemongrass oil	<i>Cymbopogon citratus</i>	Sereh dapur	Pharmaceutical, food
24	Lime oil	<i>Citrus hystrix</i>	Jeruk purut	Food and perfumery
25	Litsea cubeba	<i>Litsea cubeba</i>	Krangean	Pharmaceutical, aromatherapy
26	Massoia oil	<i>Criptocaria massoia</i>	Masoyi	Flavoring
27	Lawang oil	<i>Cinnamomum cullilawan</i>	Lawang	Balm
28	Native myrthle oil	<i>Backhousia citriodora</i>	Surawung	Pharmaceutical
29	Nutmeg oil	<i>Myristica fragrans</i>	Pala	Flavoring, cigarette
30	Palmarosa oil	<i>Cymbopogon martini</i>	Palmarosa	Pharmaceutical
31	Patchoulli oil	<i>Pogostemon cablin</i>	Nilam	Fixative
32	Piper oil	<i>Piper betle</i>	Sirih	Pharmaceutical, antiseptic
33	Rose oil	<i>Rosa sp</i>	Mawar	Perfumery, flavoring, candy, sweetener
34	Rosemary oil	<i>Rosmarinus officinale</i>	Rosemari	Pharmaceutical
35	Sandalwood oil	<i>Santalum album</i>	Cendana	Antibacterial, antiseptic, disinfectant, expectorant, sedative, stimulant, refrigerant
36	Turpentine oil	<i>Pinus merkusii</i>	Tusam	Cosmetics, oil and paint solvent, antiseptic, pharmaceutical
37	Vetiver oil	<i>Vetiveria zizanioides</i>	Akar wangi	Perfumery, soap, cosmetics, fixative
38	Wintergreen oil	<i>Gaultheria fragrantissima</i>	Gandapura	Perfumery, pharmaceutical, flavoring
39	Ylang-ylang oil	<i>Canangium odoratum</i>	Ylang-ylang	Perfumery

Source: Dr. Meika Syahbana Rusli (2010), Trubus (2009)

## Patchouli (Nilam)

Botanical name	<i>Pogostemon cablin</i>
Common method of extraction	Steam distilled
Color	Golden brown
Consistency	Medium - Thick
Perfumery Note	Base
Strenght of initial aroma	Medium
Aromatic Description	Rich, earthy, woody aroma with a nearly hidden fruity note
Uses	Acne, athlete's foot, chapped skin, dermatitis, eczema, fatigue, frigidity, hair care, insect repellent, mature skin, oily skin, stress
Constituents	Patchoulol, Esters, Beta-Caryophyllene



## Nutmeg (Pala)

Botanical name	<i>Myristica fragrans</i>
Common method of extraction	Steam Distilled
Color	Clear
Consistency	Thin
Perfumery Note	Middle
Strenght of initial aroma	Medium - Strong
Aromatic Description	Rich, spicy, sweet, woody. Similar to the cooking spice, but richer and more fragrant
Uses	Arthritis, constipation, fatigue, muscle aches, nausea, neralgia, poor circulation, rheumatism, slow digestion
Constituents	Terpinen-4-ol, Pinene, Sabinene, Cineole, Camphene, Limonene, Myristicin, Alpha Terpenene



## Clove (Cengkeh)



Botanical name	<i>Eugenia caryophyllata</i>
Common method of extraction	Steam Distilled
Color	Golden Yellow/Brown
Consistency	Medium, Slightly Oily
Perfumery Note	Middle
Strenght of initial aroma	Strong
Aromatic Description	Spicy, warming yet slightly bitter, woody, reminiscent of true clove buds, but richer
Uses	Arthritis, asthma, bronchitis, rheumatism, sprains, strains, toothache
Constituents	Eugenol, eugenyl acetate, caryophyllene, isocaryophyllene

## Vetiver (Akar Wangi)

Botanical name	<i>Vetiveria zizanoides</i>
Common method of extraction	Solvent Extraction
Color	Golden/Dark Brown
Consistency	Thick
Perfumery Note	Base
Strenght of initial aroma	Strong
Aromatic Description	Woody, earthy, herbaceous, spicy almost smoky.
Uses	Acne, arthritis, cuts, depression, exhaustion, insomnia, muscular aches, oily skin, rheumatism, sores, stress
Constituents	Benzoic acid, vetiverol, furfurol, a-vetivone, B-vetivone, vetivene, vetivenyl vetivenate





## Pepper (Lada)

Botanical name	<i>Piper nigrum</i>
Common method of extraction	Steam Distilled
Color	Clear
Consistency	Thin
Perfumery Note	Middle
Strenght of initial aroma	Medium
Aromatic Description	Crisp, fresh, peppercorn aroma
Uses	Aching muscles, arthritis, chilblains, constipation, muscle cramps, poor circulation, sluggish digestion
Constituents	Limonene, Pinene, Myrcene, Phellandrene, Beta-caryophyllene, Beta-bisabolene, Sabinene, Linalol, Pinocarveol, Alpha, Terpineol, Camphene, Alpha, Terpenene





## Cananga (Kenanga)

Botanical name	<i>Cananga odorata</i>
Common method of extraction	Steam Distilled
Color	Pale Yellow
Consistency	Thin
Perfumery Note	Middle
Strenght of initial aroma	Medium
Aromatic Description	Resembling ylang ylang in aroma, cananga is sometimes used as an economical substitute in fragrancng applications. Floral, sweet, slightly woody
Uses	Oily skin/hair, insect bites, high blood pressure, anxiety, nervous tension, stress, fragrancng
Constituents	Caryophyllene, benzyl acetate, benzyl alcohol, farnesol, terpineol, borneol, geranyl acetate, safrol, linalol



## Lemongrass (Sereh Dapur)



Botanical name	<i>Cymbopogon citratus</i>
Common method of extraction	Steam Distilled
Color	Pale Yellow to Vivid Yellow
Consistency	Thin
Perfumery Note	Top
Strenght of initial aroma	Strong
Aromatic Description	Fresh, lemony, earthy
Uses	Acne, athlete's foot, excessive perspiration, flatulence, insect repellent, muscle aches, oily skin, scabies, stress
Constituents	Citral, Geranyl Acetate, Linalyl Acetate, Geranial, Neral, Limonene, Myrcene, Beta-caryophyllene

## Citronella (Sereh Wangi)

Botanical name	<i>Cymbopogon nardus</i>
Common method of extraction	Steam Distilled
Color	Clear
Consistency	Thin
Perfumery Note	Top
Strenght of initial aroma	Medium
Aromatic Description	Citrusy, slightly fruity, fresh, sweet
Uses	Excessive perspiration, fatigue, headache, insect repellent, oily skin
Constituents	Geraniol, citronellal



## Cinnamon (KayuManis)



Botanical name	<i>Cinnamomum zeylanicum</i>
Common method of extraction	Steam Distilled
Color	Golden Yellow/Brown
Consistency	Slightly oily feeling
Perfumery Note	Middle
Strenght of initial aroma	Strong
Aromatic Description	Cinnamon Essential Oil is peppery, earthy, spicy, bright yet slightly woody. Oil distilled from the bark of the cinnamon tree is preferred over the oil distilled from the leaves. Cinnamon Bark Essential Oil, however, tends to be much more costly.
Uses	Constipation, exhaustion, flatulence, lice, low blood pressure, rheumatism, scabies, stress.
Constituents	Eugenol, eugenol acetate, cinnamic aldehyde, benzyl benzoate

## Sandalwood (Cendana)



Botanical name	<i>Santalum album</i>
Common method of extraction	Steam Distilled
Color	Clear with a Yellow Tinge
Consistency	Medium - Thick
Perfumery Note	Base
Strenght of initial aroma	Medium
Aromatic Description	Rich, sweet, fragrant yet delicate, woody, floral
Uses	Bronchitis, chapped skin, depression, dry skin, laryngitis, leucorrhea, oily skin, scars, sensitive skin, stress, stretch marks
Constituents	Santalols, santyl acetate, santalenes

## Cajuput (Kayu Putih)



Botanical name	<i>Melaleuca leucadendron</i>
Common method of extraction	Steam Distilled
Color	Clear with a Yellow Tinge
Consistency	Watery
Perfumery Note	Middle
Strenght of initial aroma	Medium
Aromatic Description	Fresh, camphorous aroma with a fruity note
Uses	Asthma, bronchitis, coughs, muscle aches, oily skin, rheumatism, sinusitis, sore throat, spots
Constituents	a-pinene, B-pinene, myrcene, a-terpinene, limonene, 1,8-cineole, y-terpinene, p-cymene, terpinolene, linaolool, terpinen-4-ol, a-terpineol





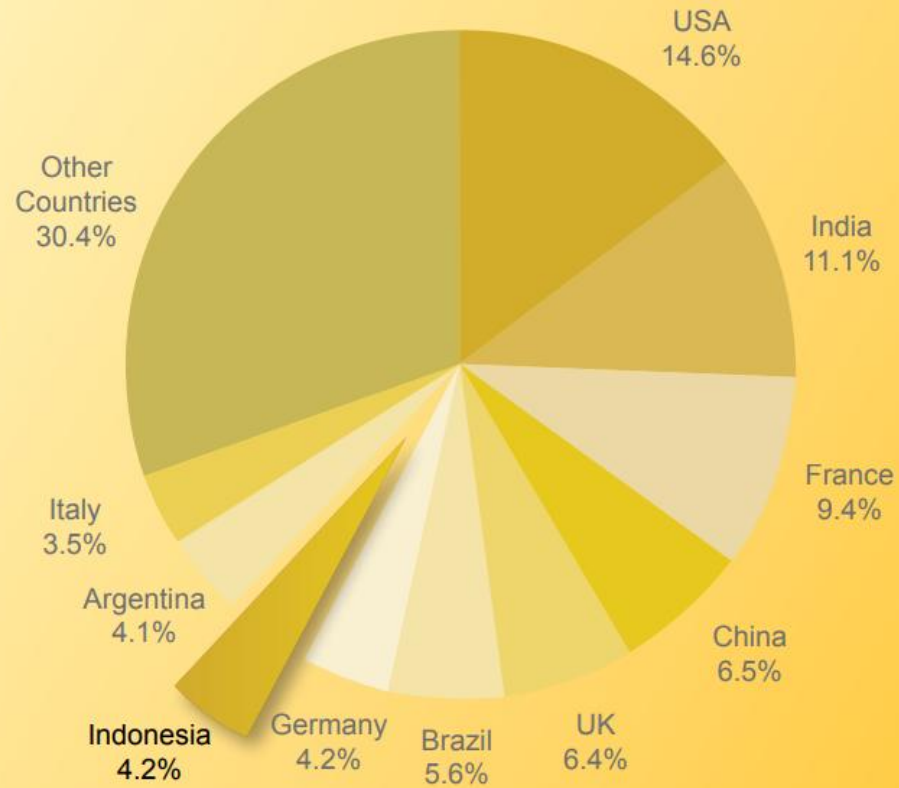
# Essential Oil & Aromatherapy Market Business Description and Corporate Strategies in Globe till 2031

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## Top Exporters of Essential Oil (HS 3301) in 2010

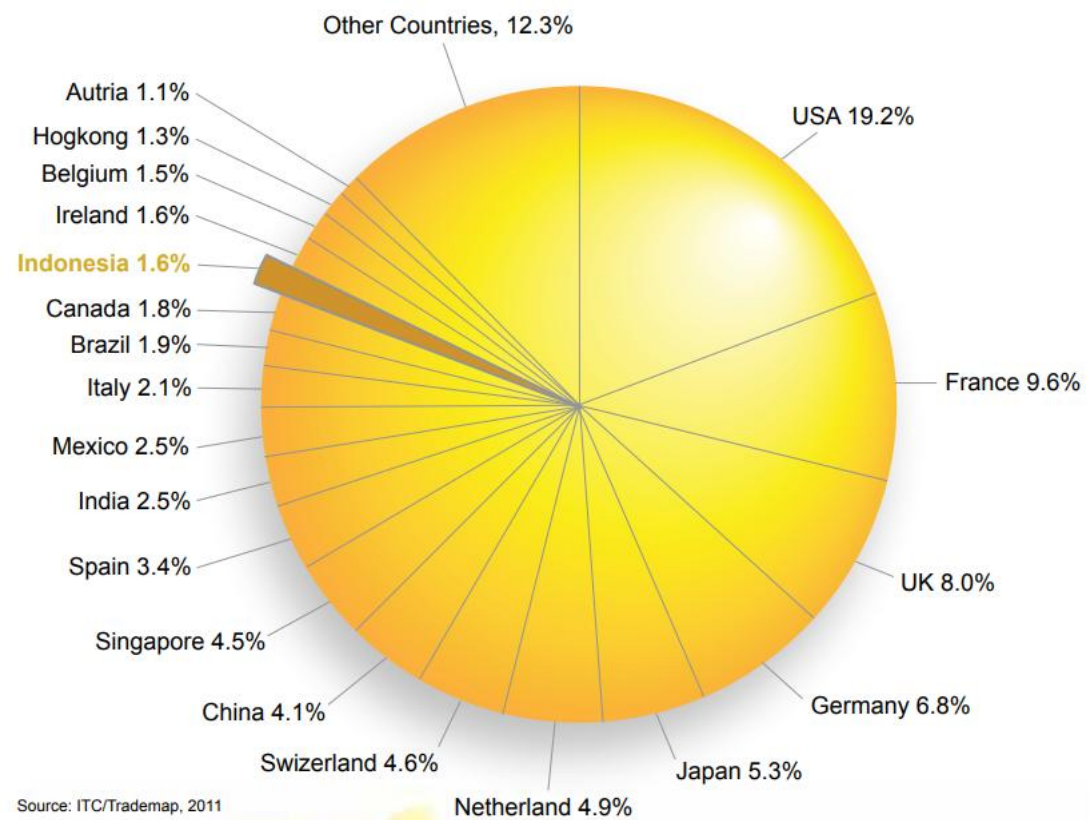
Total: US\$ 2,968 million



Source: ITC/Trademap, 2011

### World Import of Essential Oil (HS 3301) in 2010

Total: US\$ 2,968 million



Source: ITC/Trademap, 2011

## World Imports from Indonesia for HS 3301

Essential oils; resinoids; terpenic by-products etc

(in thousand US\$)

No.	Importers	Exported value in 2006	Exported value in 2007	Exported value in 2008	Exported value in 2009	Exported value in 2010
1	USA	15,660	19,766	30,895	16,445	27,861
2	Singapore	20,655	30,074	36,488	19,070	24,863
3	India	4,085	5,293	10,459	8,849	15,362
4	France	6,633	9,183	12,004	7,034	11,826
5	Spain	2,664	2,452	2,901	2,470	8,941
6	Germany	2,099	6,091	9,909	4,357	8,339
7	Switzerland	3,889	12,751	11,297	9,159	7,450
8	Netherlands	4,407	5,261	15,533	9,733	5,398
9	UK	2,323	2,999	5,685	2,844	4,115
10	UAE	1,042	698	3,649	3,111	2,790
11	China	1,083	2,867	2,146	1,070	2,255
12	Italy	66	407	897	638	692
13	Brazil	152	125	231	384	596
14	Belgium	225	422	31	5	582
15	Turkey	306	193	167	617	558
16	Japan	930	1,228	2,858	1,938	526
17	Mexico	88	210	703	664	452
18	Timor-Leste	4	-	9	188	313
19	Thailand	76	60	113	192	292
20	Philippines	13	88	131	164	278
	Other Countries	925	972	1,028	1,716	1,229

Source: ITC/Trademap, 2011

## **Who is the largest manufacturer of Essential Oil & Aromatherapy Market worldwide?**

- Young Living Essential Oils
- Thann
- Ryohin Keikaku
- Rocky Mountains Oil
- Mountain Rose Herbs
- doTerra

**On the basis of the End Users/Applications**, this report focuses on the status and outlook for major applications/end users, consumption (sales), market share, and growth rate for each application, including:

- Food & Beverages
- Medical
- Personal Care
- Homecare
- Spa & Wellness Products
- Others

## **What are the Types of Essential Oil & Aromatherapy Available in the Market?**

**On the basis of Product Type**, this report displays the production, revenue, price, market share, and growth rate of each type, primarily split into:

- Essential Oils
- Blended Oils
- Carrier Oils
- Others

## **Which Regions are Leading the Essential Oil & Aromatherapy Market?**

- North America (United States, Canada and Mexico)
- Europe (Germany, UK, France, Italy, Russia and Turkey etc.)
- Asia-Pacific (China, Japan, Korea, India, Australia, Indonesia, Thailand, Philippines, Malaysia and Vietnam)
- South America (Brazil, Argentina, Columbia etc.)
- Middle East and Africa (Saudi Arabia, UAE, Egypt, Nigeria and South Africa)



# Targeting Open Market with Strategic Business Innovations: A Case Study of Growth Dynamics in Essential Oil and Aromatherapy Industry

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**Abstract:** Essential oil and aromatherapy industry is increasingly gaining prominence in the global market. Previous studies have been carried out on the benefits of essential oils in healthcare and as part of the healing arts of many cultures, as a proven method of caring for our physical, spiritual and mental health. To enter an open market and promote the awareness of essential oils and aromatherapy, strategic planning capability is important to drive business growth. This paper utilizes a simulation-based strategic decision support system (SSDSS) to conduct a real-world case study with empirical data and examine the effectiveness of SSDSS applications in supporting market development and business growth with service innovations. Through iterative computer simulations and scenario analysis of healthcare promotion and business development for performance improvement, the effects of strategic business innovations could be systematically analyzed to identify different stages of adopters and effective approaches to achieve the established objectives with market value creation.

**Keywords:** Business Model; Strategy; Decision Support; Entrepreneurship; Business Growth

**Table 1.** Target customer analysis for Essential Oil and Aromatherapy industry.

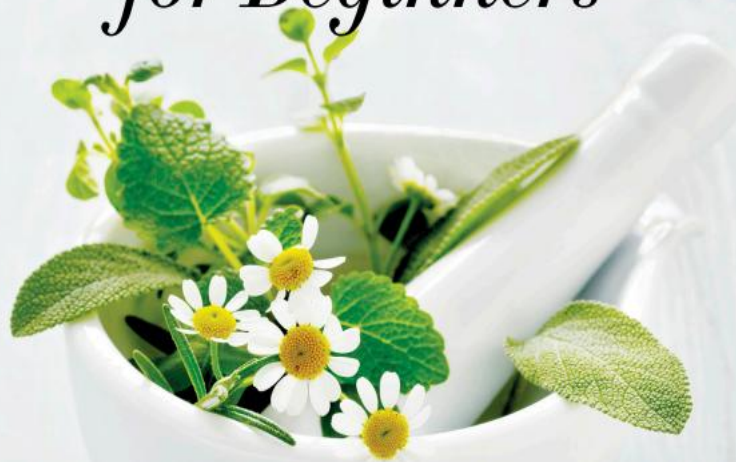
Segment	Percentage	Category
Monthly Sales Amount	75.60%	NTD\$ 1,000
	22.20%	NTD\$ 1,001 - NTD\$ 3,000
Gender Proportion	16.50%	Male
	83.50%	Female
Age Proportion	52.80%	30 - 39 years old
	27.30%	20 - 29 years old
Marital Status Proportion	60.80%	Single
	39.20%	Married
Education Proportion	60.20%	College and University
	36.40%	Business Area
	23.30%	Service Industry
Monthly Family Income	26.10%	NTD\$ 30,001 - NTD\$ 50,000
	22.20%	NTD\$ 50,001 - NTD\$ 70,000

Source: Data collected from the case company.

*New York Times Bestseller*

# ESSENTIAL OILS

*for Beginners*





This I know for certain,  
Aromatherapy is a skilled  
therapy and needs to be  
treated as such!

~ Jodi Baglien

Jodi Baglien is a  
Certified Clinical  
Aromatherapist,  
Holistic Practitioner,  
and Educator with 20  
years of experience.





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## Aromatherapy Patch Training Program

Work with a Certified Clinical Aromatherapist  
to bring aromatherapy to your patients!



# NAUSEA RELIEF No. 44

## ascents® Patch



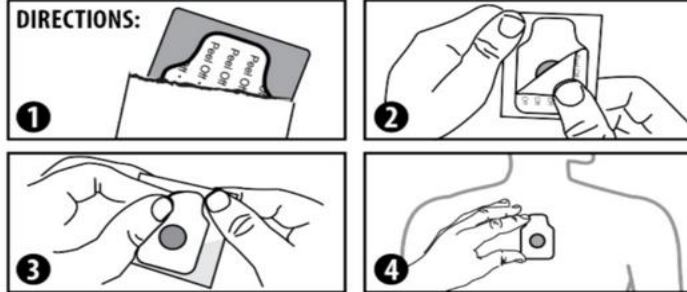
Clinical Aromatherapy Patch  
100% Natural Essential Oil Formula

Metal-free; safe for use in MRIs



----- Tear Here -----  
For best patch adhesion, clean any oil or lotion from the skin. This patch uses an occlusive barrier to prevent oils from being absorbed through the skin.

### DIRECTIONS:

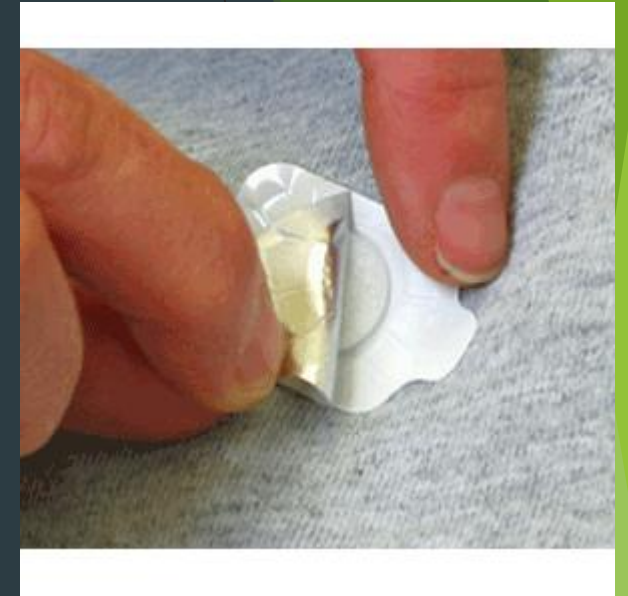


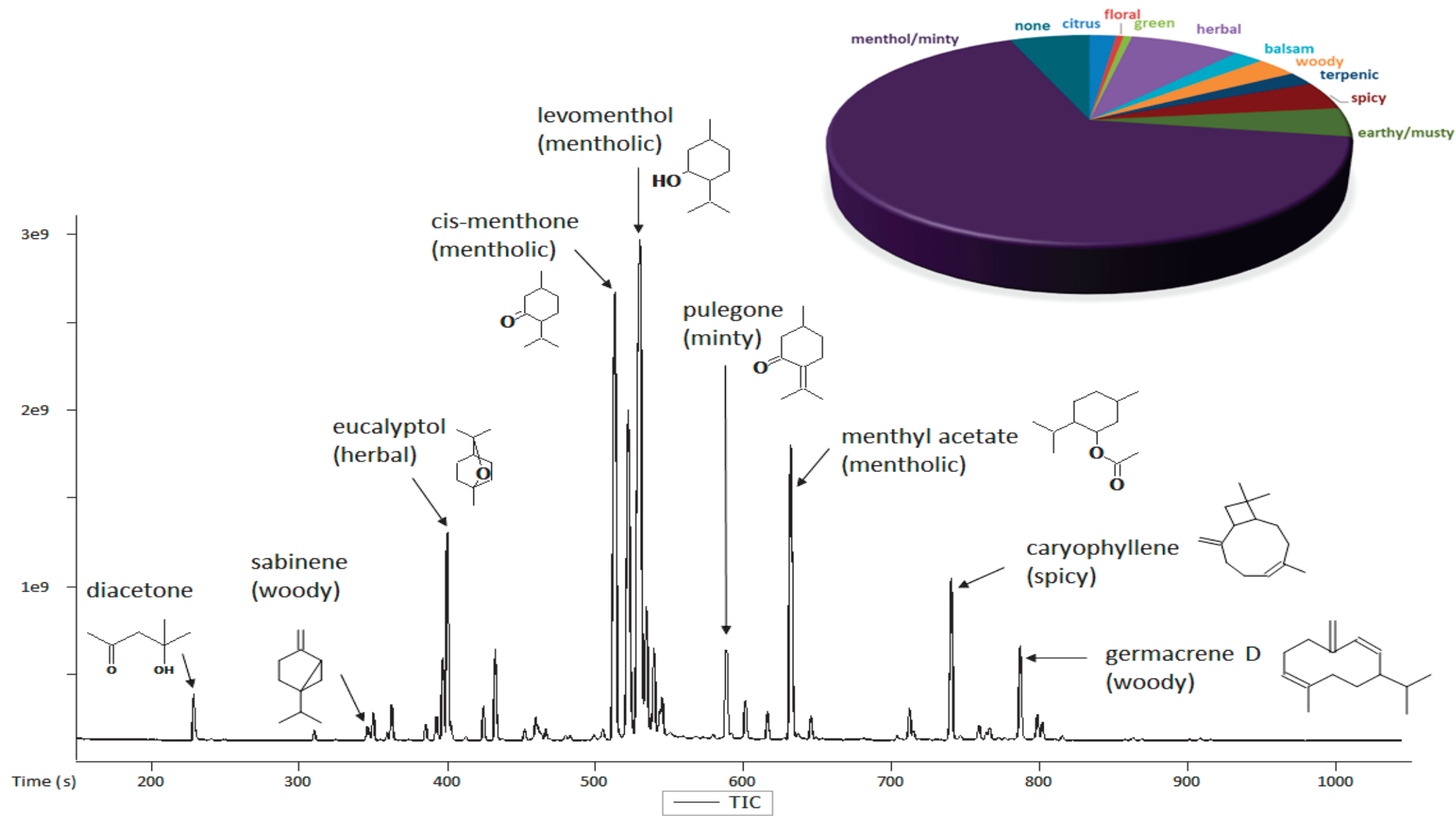
**WARNING:** CHOKING HAZARD for children under 3 years of age.

**DISCLAIMER:** The Ascents® Patch has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Made by Bioesse Technologies LLC using  
Aeroscena®'s proprietary formulas.

[shopascents.com](http://shopascents.com)  
[aeroscena.com](http://aeroscena.com)

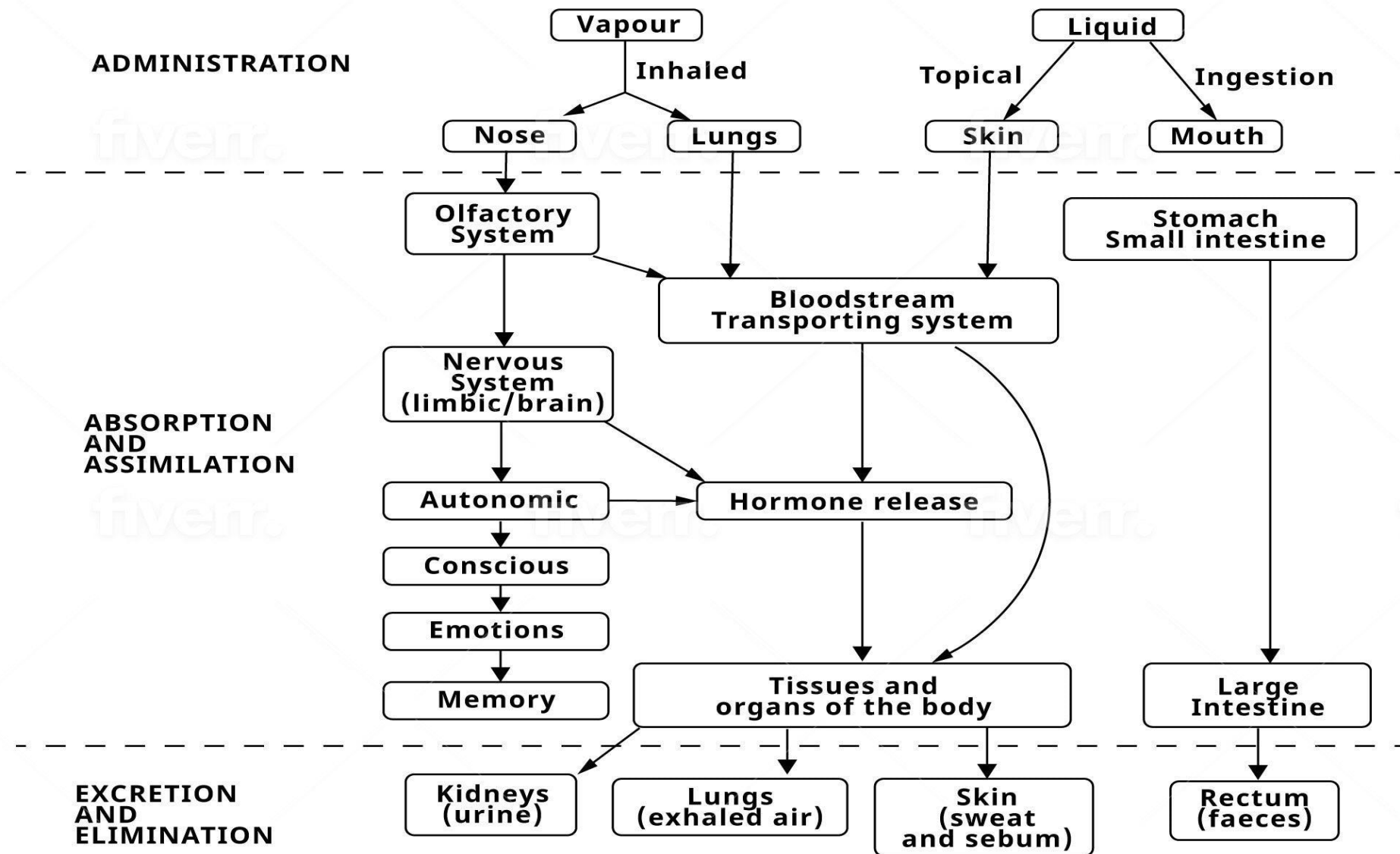


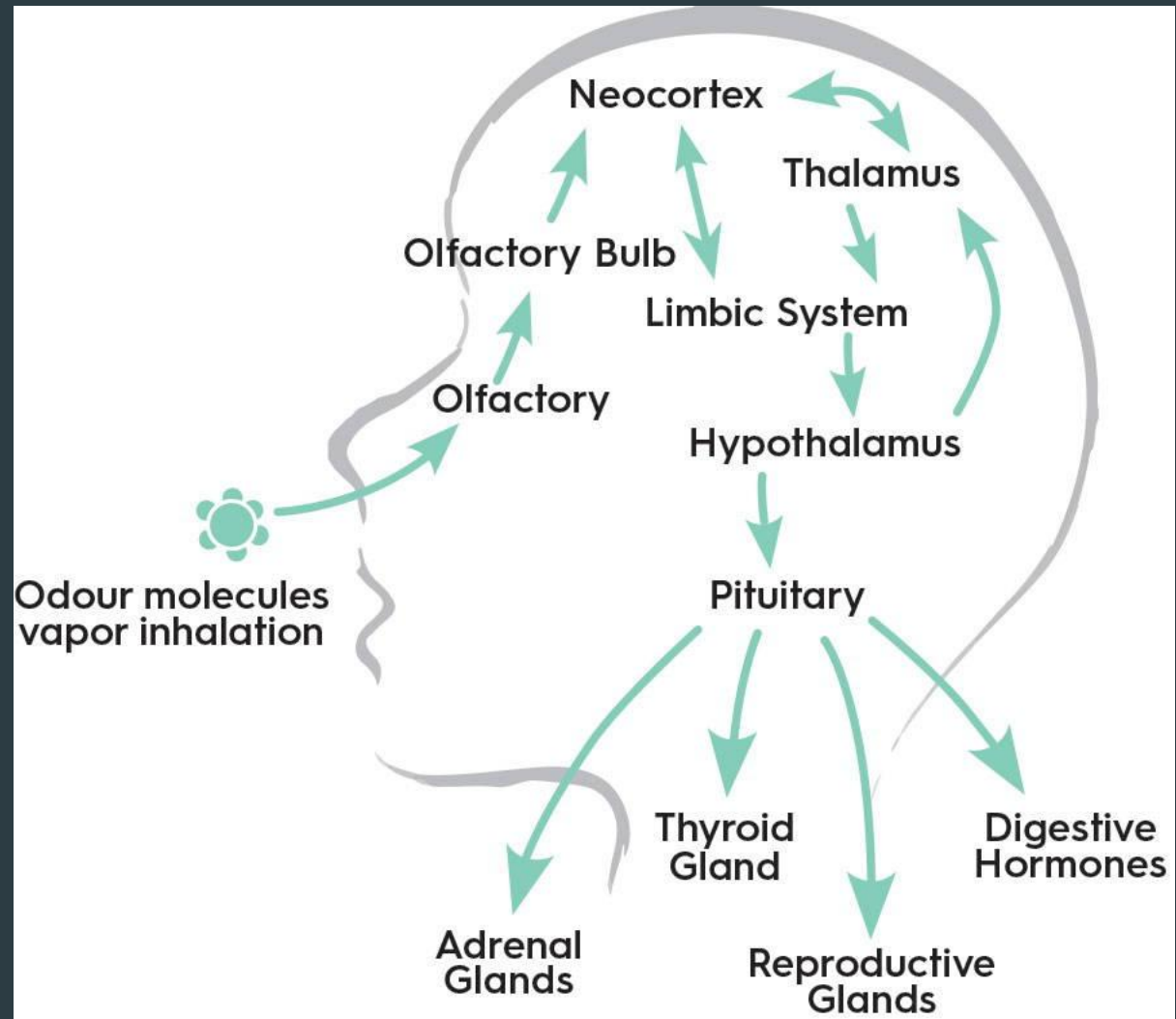




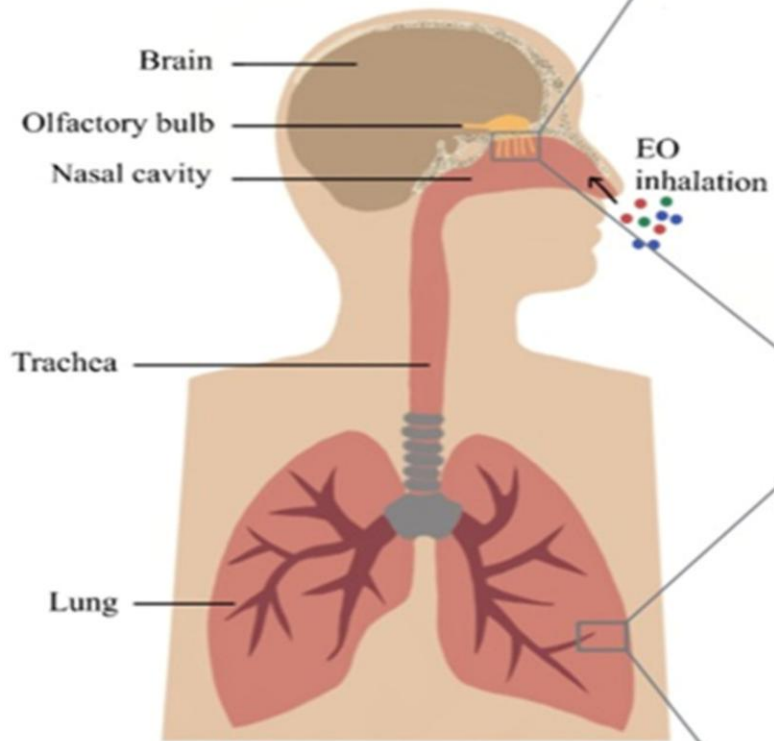
# BALANCING HORMONES WITH ESSENTIAL OILS

- ▶ Essential oils may have hormone-like activity if their structure is similar enough to a hormones' structure for them to interact with the same receptor.
- ▶ Oestrogenic activity has been found in certain plants due to their content of the chemical oestrone.
- ▶ Anethole, found in **bitter and sweet fennel, star anise** and **aniseed** essential oils, is the **methyl ether of oestrone**, and seems to display the same potent oestrogenic activity.
- ▶ Tisserand [1979] has spoken of the ability of some oils [**Geranium, Basil, Rosemary**] to stimulate the adrenal cortex, which produces oestrogen amongst other hormones.

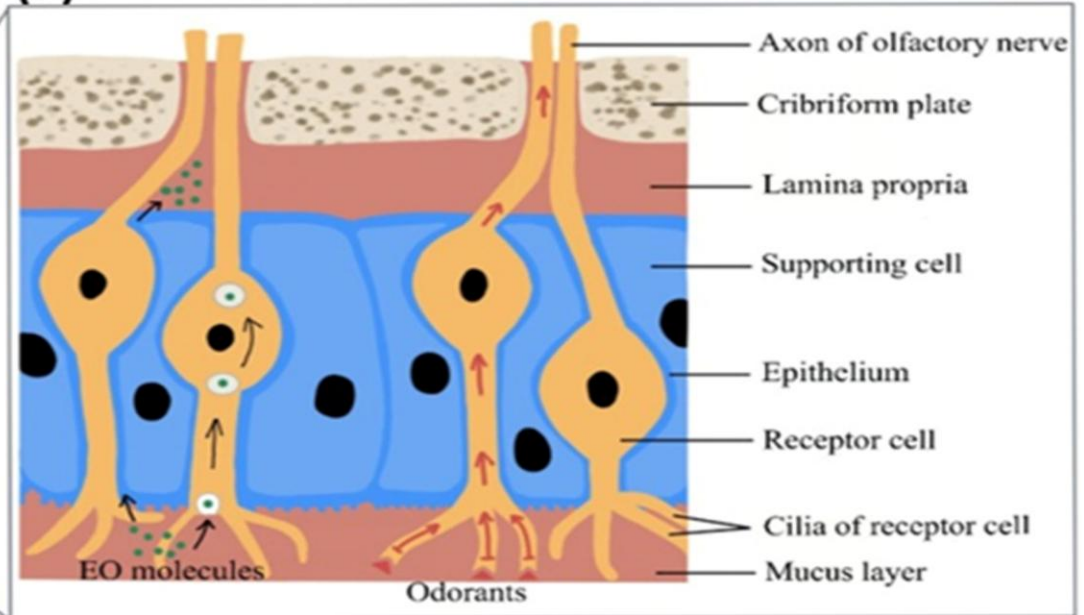




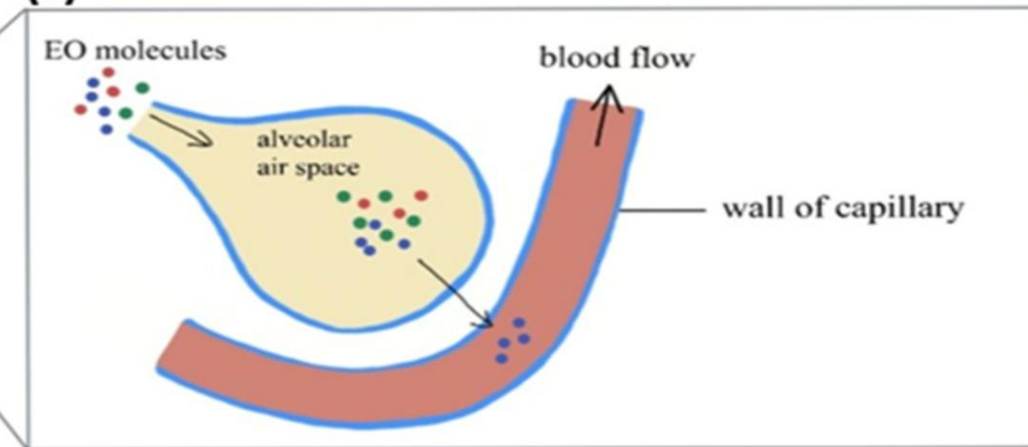
(a)

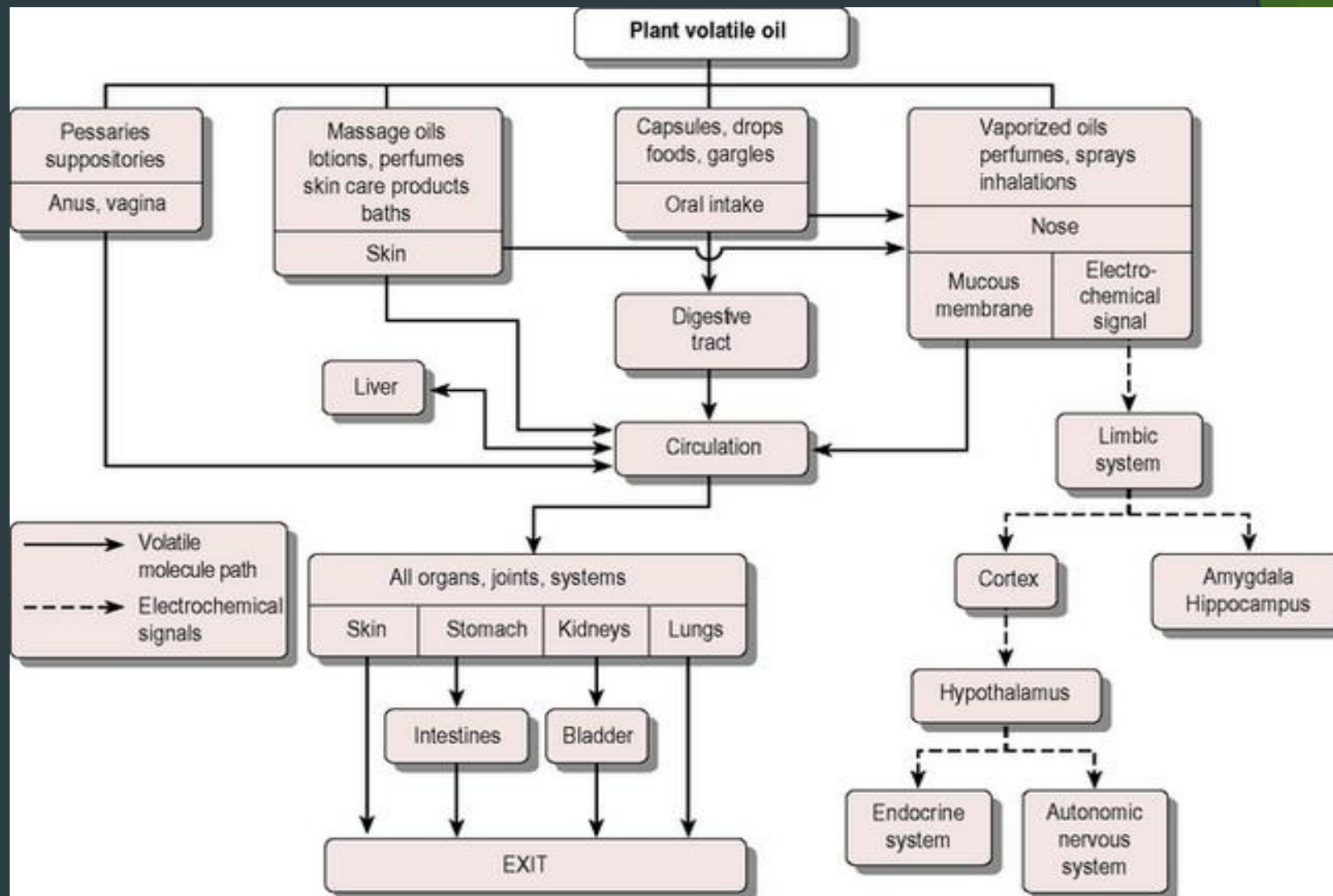


(b)



(c)









# Intranasal Borneol Improves the Behavioral Problems and Enhances the Immunologic Function in Children with Autism

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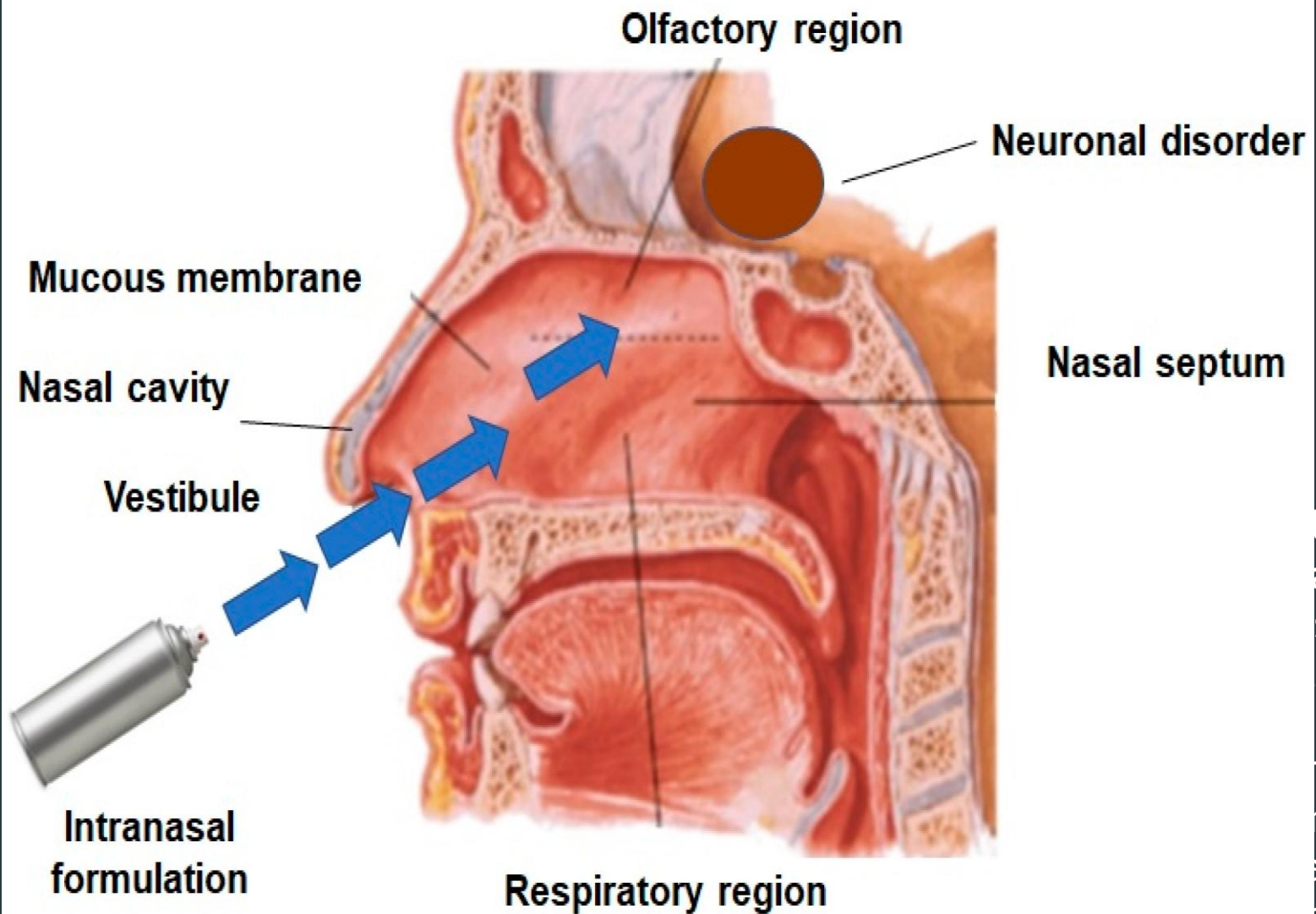
<sup>4</sup>Department of Chemical Pathology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, Hong Kong SAR

<sup>5</sup>Institute of Chinese Medicine and State Key Laboratory of Phytochemistry and Plant Resources in West China, The Chinese University of Hong Kong, Shatin, Hong Kong SAR

<sup>6</sup>Henan Songshan Research Institute for Chanwuyi, Henan 452470, China

## Abstract

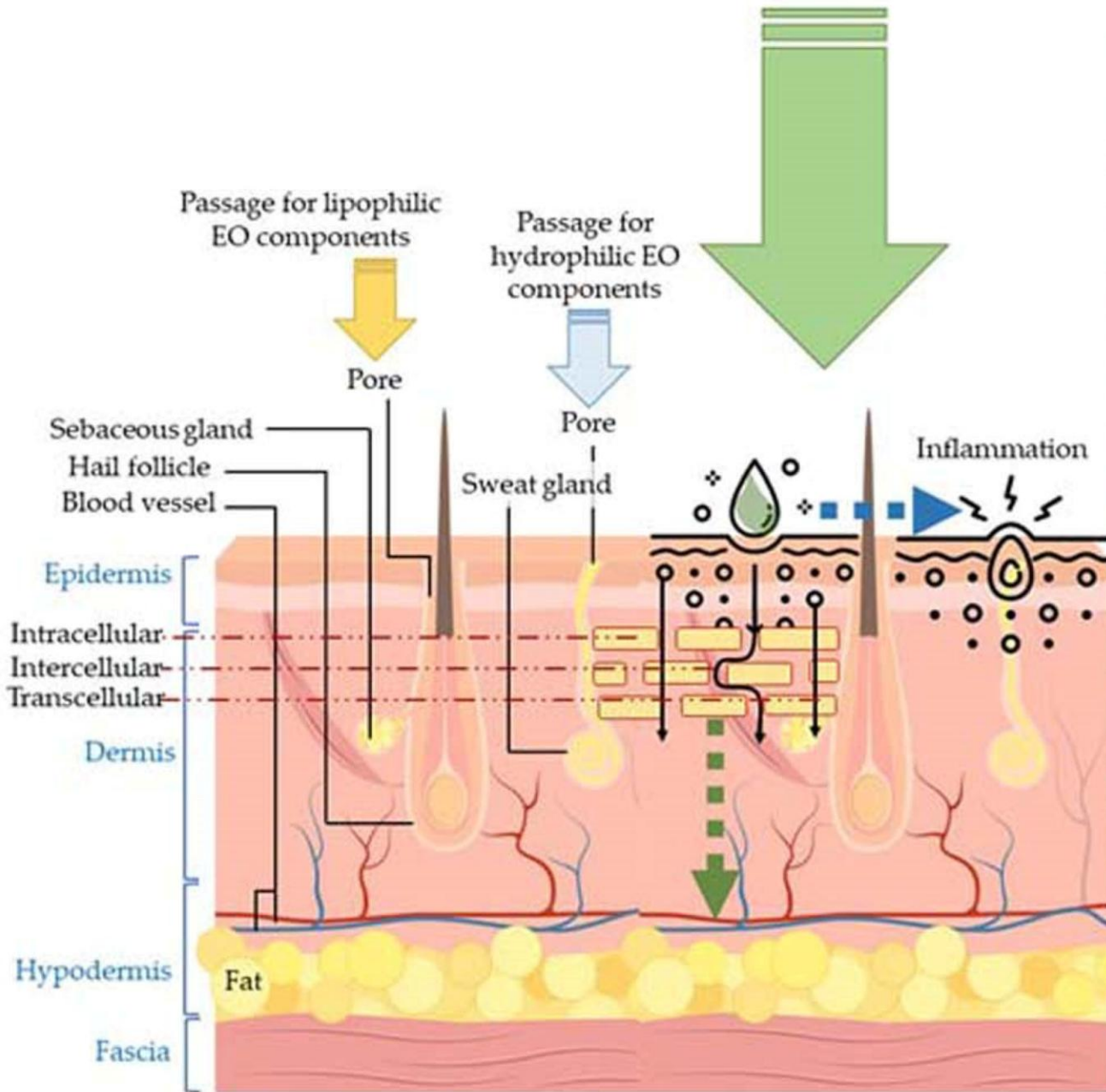
Children with autistic spectrum disorder (ASD) have difficulty interacting with others both verbally and behaviorally. In addition, they display impaired temper and behavior control. These two impairments hamper the daily functions required for independent living. The current study evaluated a patented intranasal herbal formula including borneol as a possible intervention for improving the social ability and self-control of children with ASD. Thirty children with ASD participated in this study, with 15 receiving the herbal medicine and 15 serving as control subjects. After six months of intervention, the children in the experimental group showed significant improvements in their social and self-control abilities. Furthermore, their immunologic function, as indexed by the significant reduction in circulating CD3+CD8+ suppressor/cytotoxic T lymphocytes in their blood samples, was significantly improved. By contrast, the children in the control group did not show improvement in their social or self-control abilities, and no significant difference was found in their immunologic function over the six-month period. Thus, the results suggest that the intranasal herbal formula has therapeutic effects on the behavioral problems of children with ASD.



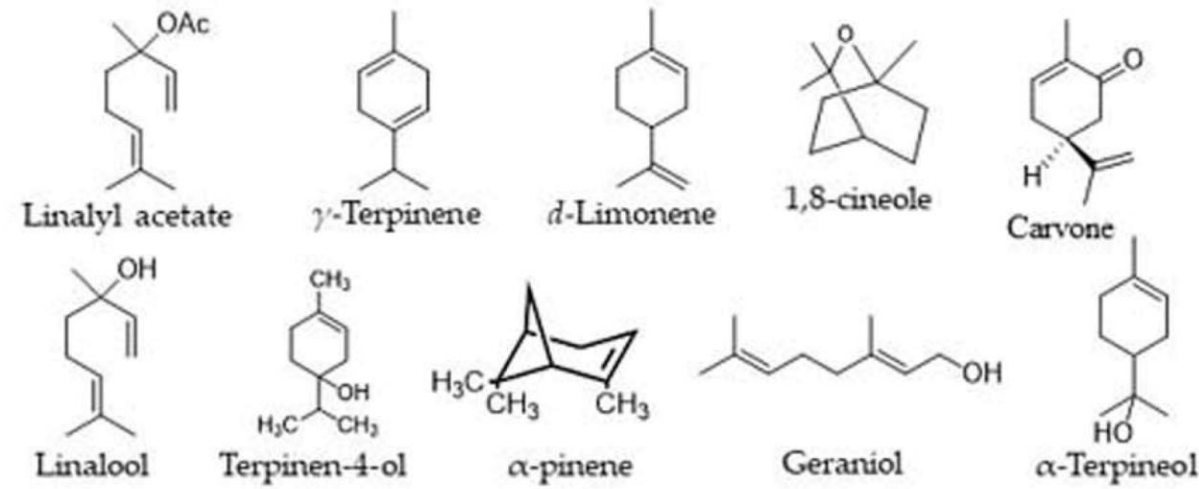
Recent evidence supports the effectiveness of intranasal administration for the treatment of various brain disorders, including benzodiazepines for epilepsy (Fişgin et al., 2010), stem cells for Alzheimer's disease (Bossolasco et al., 2012, 2011), and insulin for the treatment of the Alzheimer's type (Craft et al., 2012, 2011).



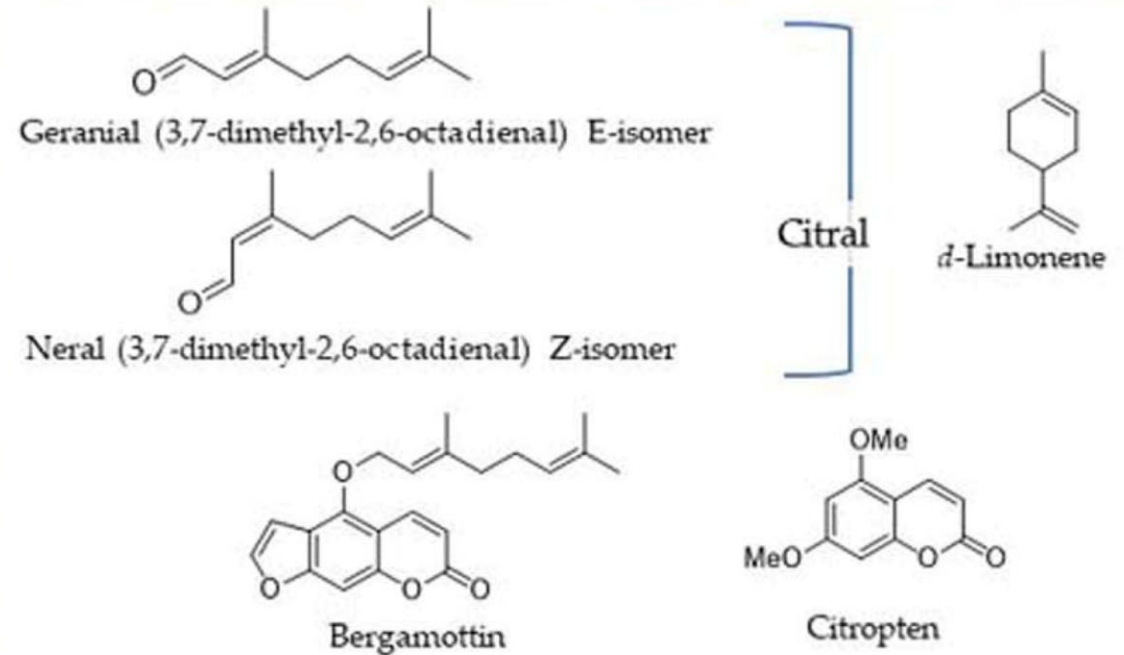
## Citrus EO to skin



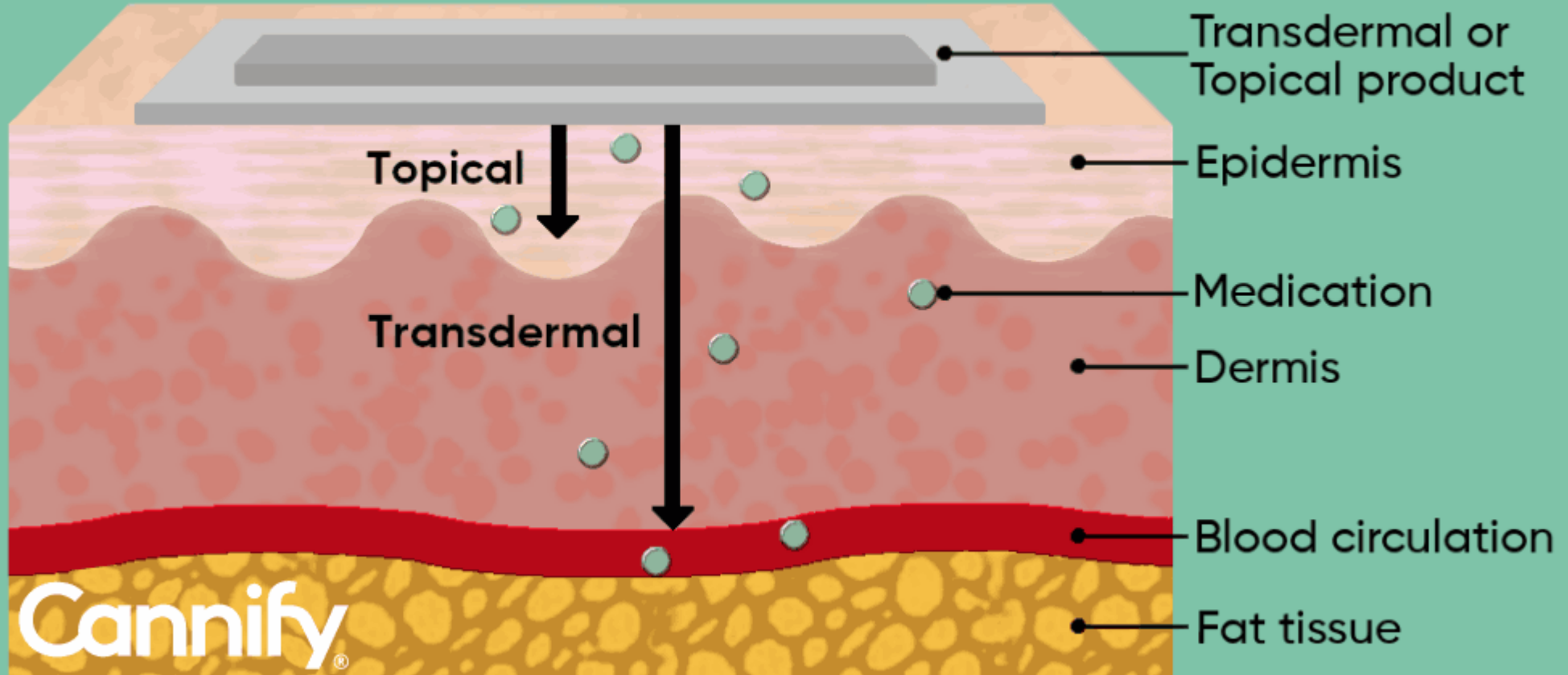
## Skin penetration enhancers (facilitate transdermal drug delivery)



## Anti-inflammatory/ Antioxidant/ Anti-microbial/ Anti-carcinoma



## Cross-section of the skin



# Jenis-jenis SPA

## Yankee SPA Tradisional

## Yankee SPA Medis

- Health SPA → @Griya Spa Tirta I
- Wellness SPA → @Griya Spa Tirta II dan III



## Griya SPA

Griya SPA Tirta I

Relaksasi

Griya SPA Tirta II

Relaksasi  
Rejuvenasi

Griya SPA Tirta III

Relaksasi  
Rejuvenasi  
Revitalisasi





# Griya SPA

	Tirta I	Tirta II	Tirta III
<b>1. Metode :</b>			
<b>a. Hidrotherapy</b>			
• Perawatan berendam dengan suhu normal/netral	✓	✓	✓
• Perawatan berendam dengan air panas ditambahkan ramuan dan/atau minyak atsiri	✓	✓	✓
• Perawatan dengan steam	✓	✓	✓
• Perawatan tangan dan kaki dengan menggunakan air	✓	✓	✓
• Perawatan berendam dengan Sitz bath	-	✓	✓
• Perawatan dengan ice dan contrast bath	-	✓	✓
• Perawatan dengan underwater massage	-	✓	✓
• Perawatan dengan : balneotherapy, algotherapy, fangotherapy, mud therapy, Thallasotherapy	-	✓	✓

**Permenkes No. 8 Tahun 2014  
tentang  
Pelayanan Kesehatan SPA**











# SARANA MINIMUM USAHA GRIYA SPA TIRTA 1

Peraturan Menteri Pariwisata dan Ekonomi Kreatif  
No.4 Tahun 2021



eco SPA

organic wellness









*Doublingtage*  
*Holistic Topical Massage*



# Pengertian

- ▶ Terapi modalitas dengan pendekatan holistik berbasis *Swedish massage therapy (SMT)*, *Aroma-Acupoint therapy (AAT)* dan *topical nanoemulgel (TNEG)*.
- ▶ Menyatukan antara pendekatan klasik dan modern (*classical & modern approach*).

# 10 Keunggulan:

1. Non-invasif
2. Inovatif
3. Spesifik
4. Efek samping minimal
5. Manfaat optimal
6. Terapi sinergis
7. Fleksibel terapi
8. Rasional
9. Ilmiah
10. Holistik

Table 7: Definition of grades of recommendations (NHMRC 2009)<sup>18</sup>

Grade of Recommendation	Description
<b>A</b>	Body of evidence can be trusted to guide practice
<b>B</b>	Body of evidence provides moderate support to guide practice in most situations
<b>C</b>	Body of evidence provides limited support for recommendation(s) and care should be taken in its application
<b>D</b>	Body of evidence is weak and any recommendation must be applied with caution
<b>E</b>	Body of evidence is insufficient to provide recommendation

A narration of the current evidence is provided for respective recommendations with emphasis on those graded A, B and C due to greater clinical relevance. A narrative review was also undertaken to outline the safety profile of massage therapy, with reference to literature that highlighted safety/adverse effects in their titles and/or abstracts.

Figure 2: Growth of published studies on the effectiveness of massage therapy

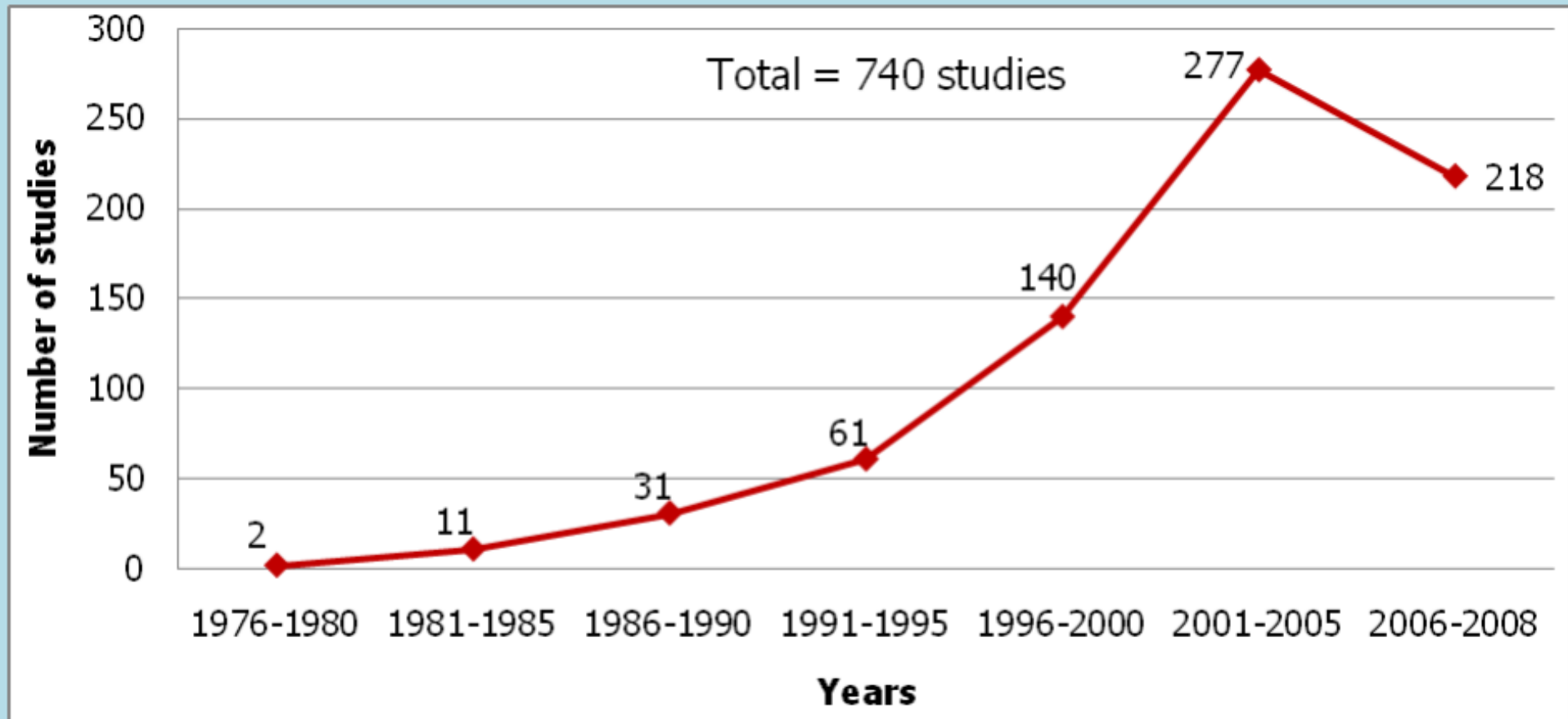


Table 9: Subgroups of participants and topic areas of study included in this review

Participant Subgroups		Number of studies
Allopathic Medical Specialties & Special Population Groups	<i>Anaesthetic</i>	3
	<i>Cardiology</i>	12
	<i>Dermatology</i>	6
	<i>Endocrinology</i>	6
	<i>Gastrointestinal</i>	13
	<i>Genetics/Developmental</i>	14
	<i>Geriatrics (include psychogeriatric)</i>	▪ 32
	<i>Gynaecology</i>	13
	<i>Haematology</i>	7
	<i>Immunology</i>	2
	<i>Infectious diseases</i>	14
	<i>Intensive care</i>	9
	<i>Mental Health</i>	▪ 35
	<i>Musculoskeletal</i>	▪ 150
	<i>Neurology</i>	▪ 46
	<i>Neurosurgery</i>	1
	<i>Obstetric</i>	▪ 39
	<i>Oncology</i>	▪ 76
	<i>Ophthalmology</i>	1
	<i>Orthopaedic</i>	3
	<i>Paediatrics</i>	▪ 88
	<i>Palliative Care</i>	▪ 24
	<i>Plastics</i>	6
	<i>Rehabilitation</i>	3
	<i>Respiratory</i>	15
	<i>Rheumatology</i>	15
	<i>Sexual &amp; Reproductive Health</i>	1
	<i>Spinal</i>	8
	<i>Surgery</i>	▪ 38
	<i>Urology</i>	4
	<i>Vascular</i>	6
Sports	<i>Exercise recovery</i>	▪ 27
	<i>Sports performance</i>	▪ 28
	<i>Sports psychology</i>	2
Others		▪ 81
Physiology		▪ 33

▪ Represent the most active domains of research

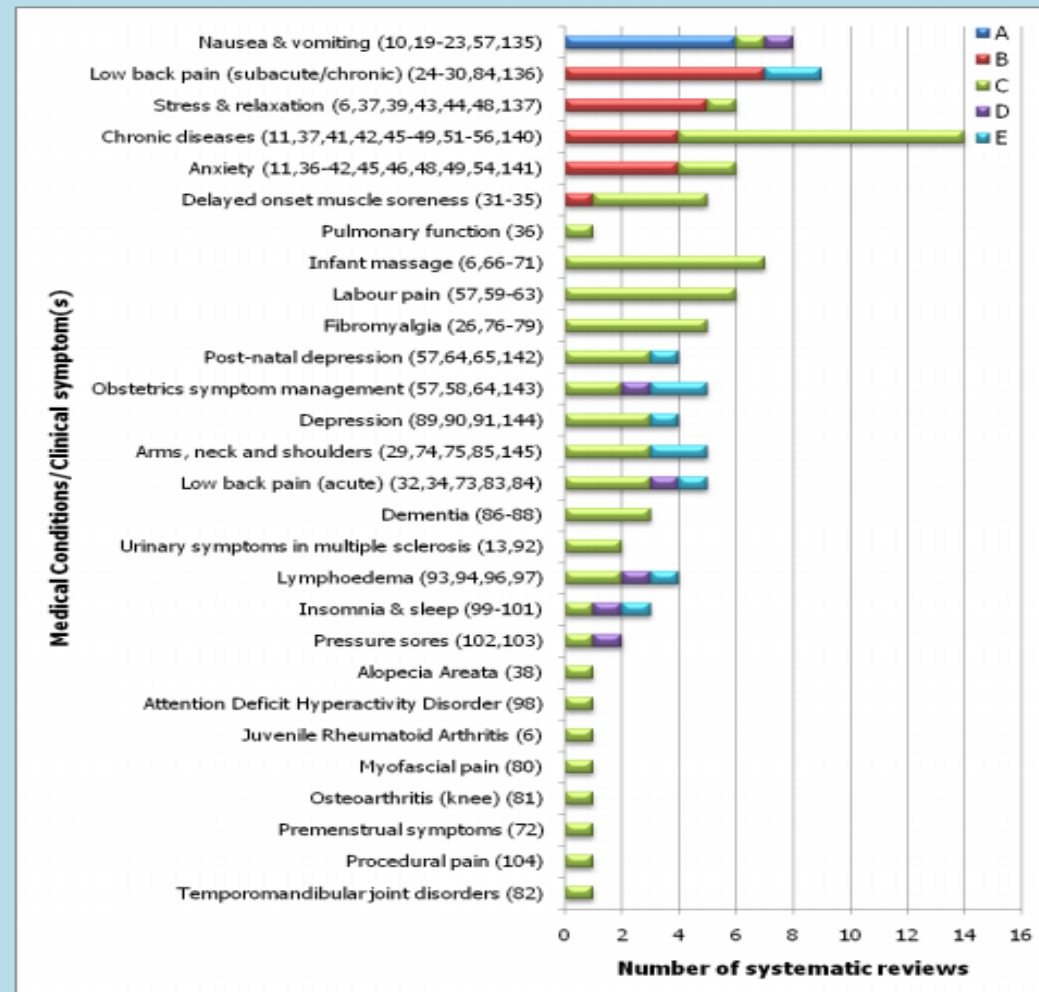
Table 10: Massage therapies/modalities included in this review

Sourced therapies/modalities	Number of studies
1. Acupressure	• 86
2. Aromatherapy	• 53
3. Ayurvedic	1
4. Bowen	7
5. Deep tissue	18
6. Deep transverse friction	4
7. Hawaiian/Lomi-lomi	Nil
8. Indian Head	Nil
9. Infant	• 40
10. Manual Lymphatic Drainage	15
11. Myofascial release	19
12. Reflexology	• 49
13. Remedial	Nil
14. Rolfing	5
15. Seated	10
16. Shiatsu	11
17. Sports	• 46
18. Swedish	• 82
19. Thai	3
20. Trager	Nil
21. TCM including Tuina/Qigong	22
22. Trigger point therapy	21
<b>Unsourced therapies/modalities</b>	
1. Anma (Japanese)	1
2. Back / Slow stroke back	19
3. Classical	1

- Represent therapies/modalities most commonly researched; NSM, non-specified (type of) massage; TCM, Traditional Chinese medicine



Figure 3: Summary of systematic reviews



Grade of Recommendation	Description
A	Body of evidence can be trusted to guide practice
B	Body of evidence provides moderate support to guide practice in most situations
C	Body of evidence provides limited support for recommendation(s) and care should be taken in its application
D	Body of evidence is weak and any recommendation must be applied with caution
E	Body of evidence is insufficient to provide recommendation

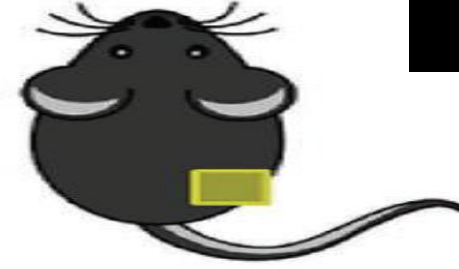




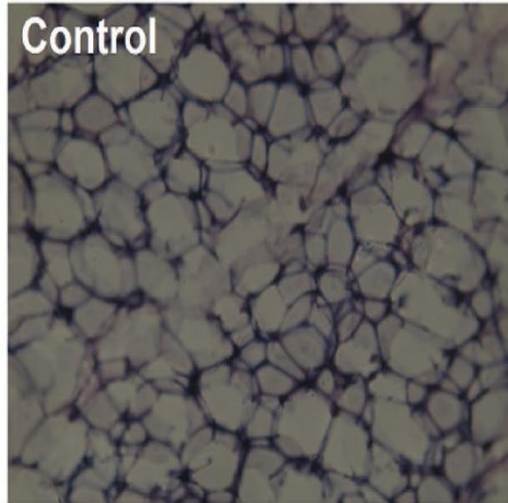
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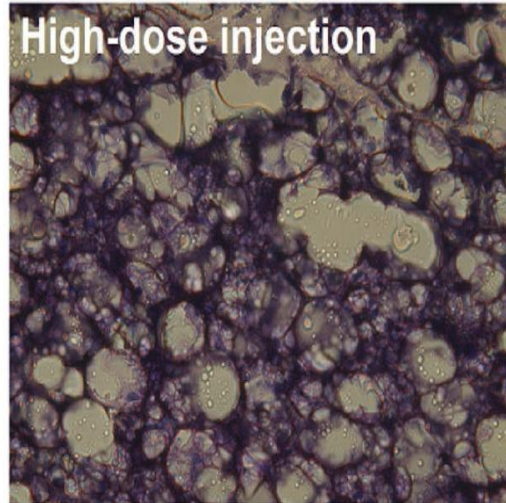
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CL316,243  
injection**



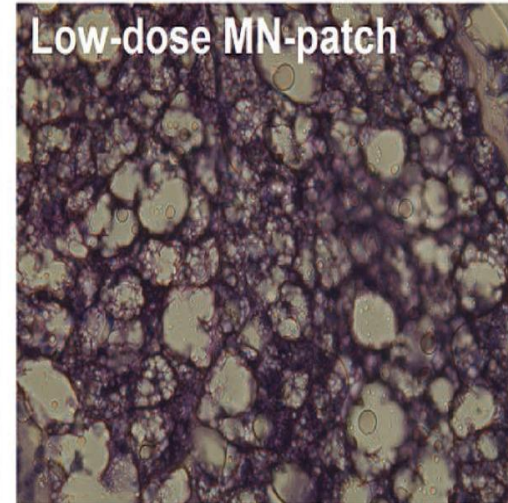
**Low-dose  
CL316,243  
MN-patch**



**Control**

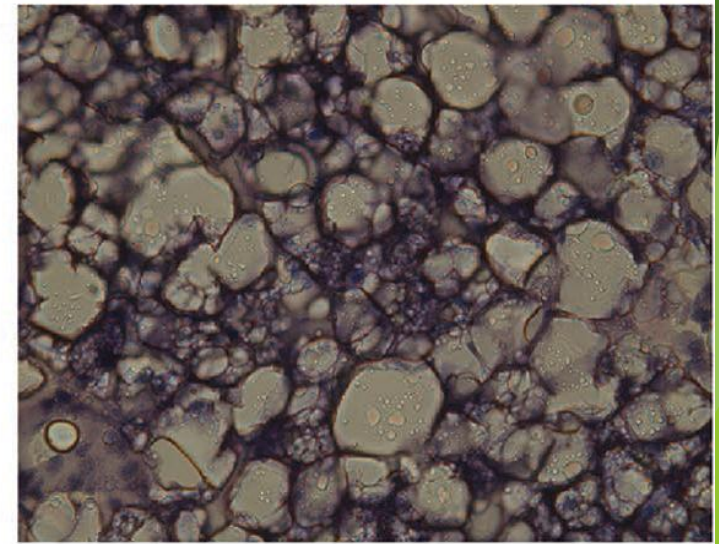
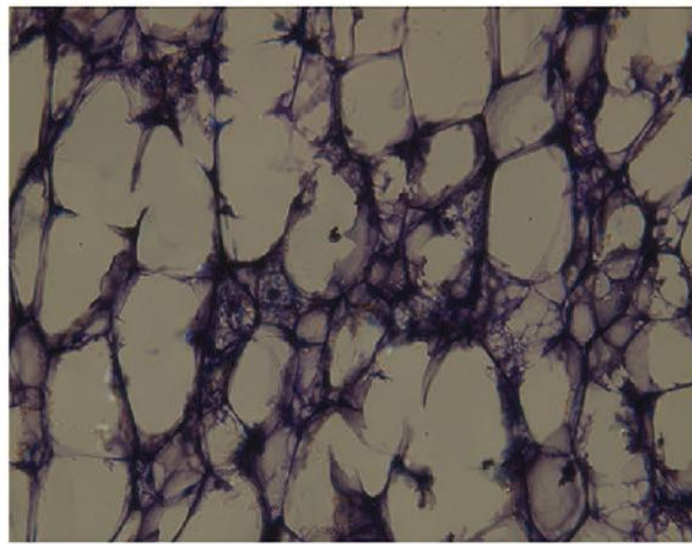
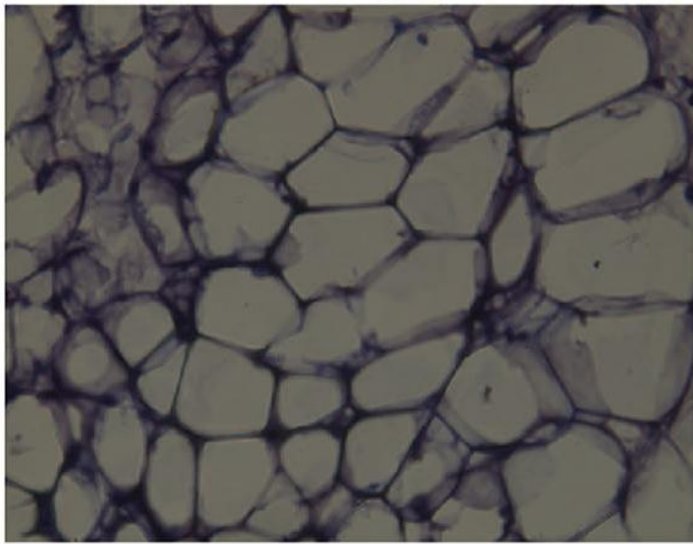
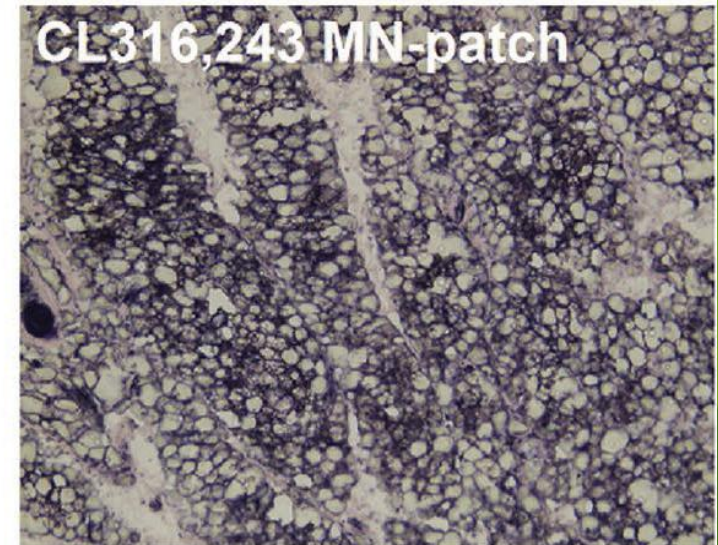
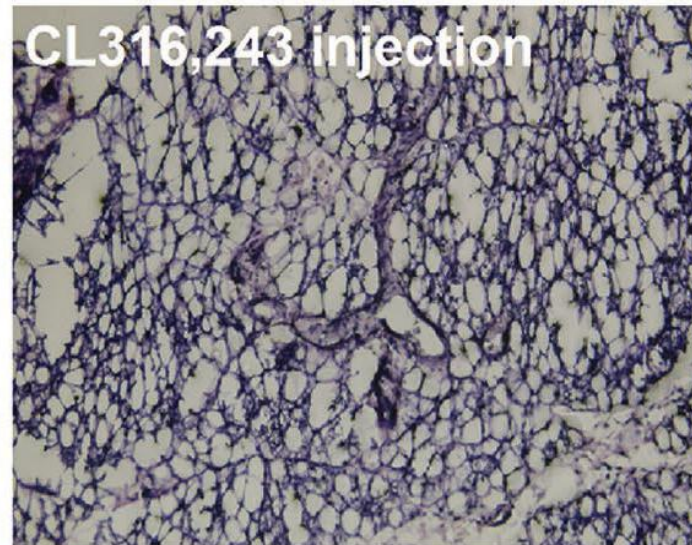
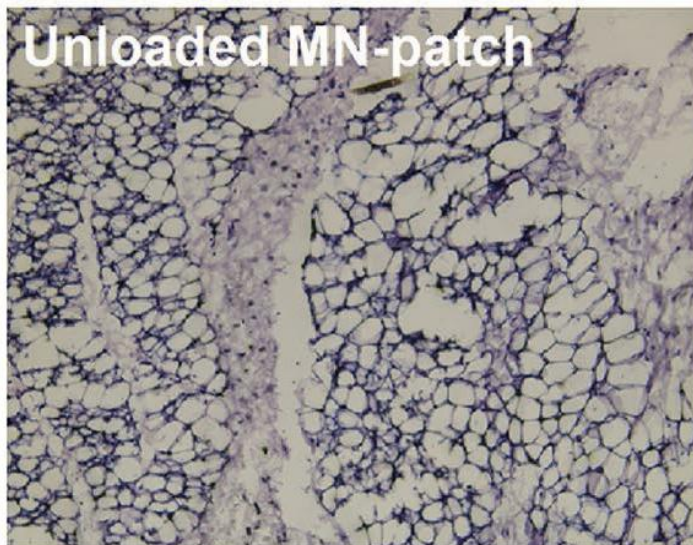


**High-dose injection**

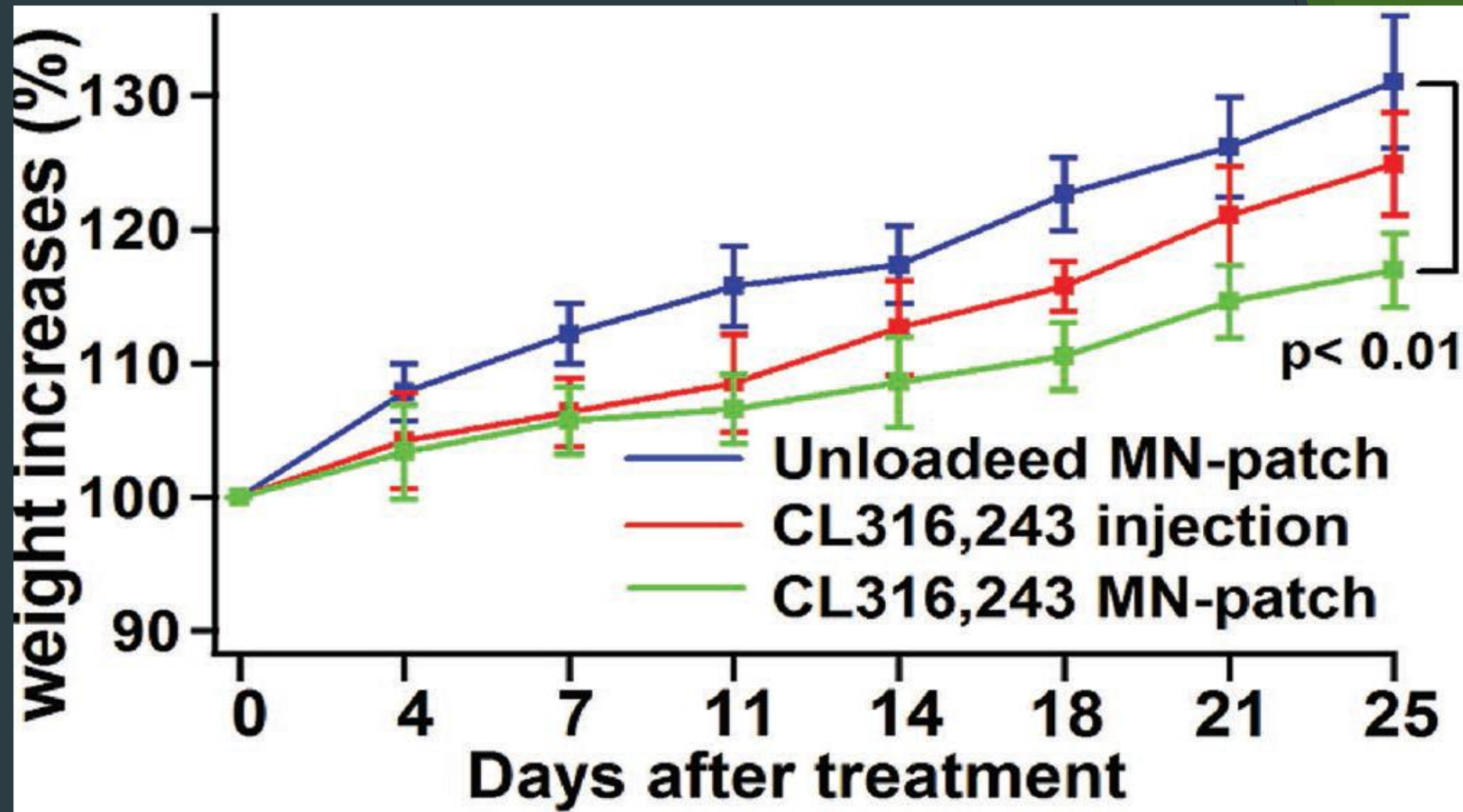


**Low-dose MN-patch**











Synergy implies that essential oils are, broadly speaking, more powerful in combination than when they act alone.

SCENT FAMILY	DESCRIPTORS	ESSENTIAL OILS	BLENDS WITH
Citrus	Fruity, Tangy	Lemon, Orange, Grapefruit, Tangerine, Mandarin	Floral, Minty, Spicy, Woody
Floral	Feminine, Soft	Lavender, Neroli, Jasmine, Geranium, Rose	Citrus, Spicy, Woody
Herbaceous	Green, Grassy	Clary Sage, Fennel, Rosemary, Thyme, Tea Tree	Minty, Woody
Camphoraceous	Intense, Medicinal	Camphor, Eucalyptus, Cajeput, Pennyroyal, Laurel Leaf	Citrus, Spicy, Woody, Herbaceous

<b>Minty</b>	Cooling, Earthy	Spearmint, Wintergreen, Peppermint	Citrus, Woody, Herbaceous, Earthy
<b>Woody</b>	Masculine, Musky	Sandalwood, Pine, Juniper Berry, Cedarwood, Patchouli	Floral, Herbaceous, Minty, Spicy, Citrus
<b>Spicy</b>	Warm, Crisp	Basil, Black Pepper, Cinnamon, Ginger, Nutmeg	Floral, Woody, Citrus
<b>Resinous</b>	Fresh, Piney	Elemi, Frankincense, Myrrh	Citrus, Floral

PERFUME NOTE	EVAPORATION RATE	COMMONLY USED ESSENTIAL OILS
Top	0.5 - 3 hours	Bay, Citrus Oils, Eucalyptus, Lavender, Mint Oils, Petitgrain, Pine, Rosemary, Sage
Middle	2 - 4 hours	Black Pepper, Clove Bud, Cinnamon, Fir Needle, Geranium, Marjoram, Myrrh, Palmarosa, Rose Absolute
Base	Up to several days	Cedarwood, Frankincense, Valerian, Vetiver, Spikenard, Patchouli, Sandalwood

REPUTED BENEFITS	ESSENTIAL OILS
<b>Aphrodisiac</b>	Clary Sage, Lavender, Litsea Cubeba, Mandarin, Nutmeg, Rose, Rosewood, Sandalwood, Vetiver
<b>Anti-inflammatory</b>	Clove Bud, Ginger, Helichrysum, Orange, Roman Chamomile, Turmeric
<b>Antiseptic/Antimicrobial</b>	Cinnamon, Citronella, Eucalyptus, Lemon, Rosemary, Tea Tree
<b>Balancing</b>	Blue Tansy, Cedarwood, Juniper Berry, Marjoram, Patchouli, Pine, Spruce, Ylang Ylang
<b>Calming</b>	Bergamot, Frankincense, Geranium, Jasmine, Lavender, Lemon, Neroli, Ylang Ylang, Valerian

<b>Calming</b>	Bergamot, Frankincense, Geranium, Jasmine, Lavender, Lemon, Neroli, Ylang Ylang, Valerian
<b>Carminative</b>	Basil, Cardamon, Cinnamon, Fennel, Ginger, Nutmeg
<b>Detoxifying</b>	Cypress, Lemon, Fennel, Juniper Berry, Palmarosa, Patchouli, Peppermint
<b>Stimulating</b>	Eucalyptus, Ginger, Grapefruit, Lemon, Lime, Peppermint, Rosemary, Sweet Orange
<b>Uplifting</b>	Bergamot, Frankincense, Lavender, Lime, Roman Chamomile, Rosemary, Ylang Ylang



## **Essence Oils**

Essential oils not extracted via steam or pressure are referred to as essence oils. Essence oils are derived in a variety of ways from flowers, barks, leaves, roots or resins.

**Concretes:** The aromatic plant matter is extracted by organic solvents such as hydrocarbons. Concretes are more stable and concentrated than unmodified essential oils.

**Resinoids:** Oils from natural resins such as frankincense, myrrh, amber, benzoin, etc. are extracted using hydrocarbon solvents. Occasionally the ethanol soluble fraction of a resinoid is called an absolute.

**Absolutes:** They are obtained by taking the concretes through a second process of ethanol extraction or liquid carbon dioxide. With the latter process, the oils produced are of excellent aroma quality and entirely free of unwanted solvent residues or non-volatile matter.

## **Carrier Oils and Alcohol**

Many essential oils are much too strong and often expensive to use without dilution. To moderate such attributes carrier oils are used to dilute and carry the fragrance for use as a perfume. Carrier oils come from nuts and seeds and are usually pressed out of commercially produced crops. The best carrier oils are stable to oxidation and have little or no fragrance of their own, and they include oils from sweet almond, apricot, peach kernel, sesame seed, soybean, sunflower, avocado, and jojoba. Some of these oils can be used as the only carrier while others are only safe for skin use at 10-25% of the total amount. Alcohol is added to perfumes to carry the fragrance by evaporation as well as dilute the ingredients. Perfumes contain 25% fragrance and about 75% alcohol and other diluents (carrier oils) by volume while cologne is composed of more than 90% diluent.

GETTING TO KNOW YOUR

# CARRIER OILS



## Carrier oil (minyak pelarut)

- ▶ adalah minyak nabati yang biasanya diperoleh dari metode pressing biji tumbuhan.
- ▶ Carrier oil digunakan agar aplikasi essential oil ke kulit lebih nyaman dan lebih efektif.



Table 2. Examples of base oils used for skin massages and care

Indications	Plant oils
dry and sensitive skin	avocado oil, apricot kernel oil, wheat germ oil, almond (sweet) nut oil, kukui (candle nut) oil, macadamia nut oil, green coffee oil, jojoba oil, marula oil, linseed oil, blackcurrant seed oil, olive oil
oily, combination, acne skin	babassu oil, chaulmoogra oil, baobab oil, sesame oil, evening primrose oil, borage oil, linseed oil, rosehip seed oil, sesame oil, sunflower oil, grape seed oil
mature skin, with the signs of ageing	rice bran oil, wheat germ oil, corn germ oil, soybean oil, rosehip seed oil, green coffee oil, grape seed oil, avocado oil, olive oil, coconut oil, sweet almond oil, sesame oil, argan oil
skin of children and infants	sunflower oil, evening primrose oil, borage oil, linseed oil, olive oil





## Fixatives

Fixatives are scented components that act to hold the fragrance together and regulate rate of evaporation for the fragrant components. The fixatives often provide a base note and character to the mixture. One of the most important steps in the manufacture of a fine perfume is the addition of a fixative which enables the essential oils to retain their fragrance for a longer period of time. Fragrances remain fresh if they are protected from light, heat and oxygen for about three years from the date of manufacture. They are categorized based on the source into seven different classes (see *Box 1*).

### Box 1.

1. Ambergris
2. Bitter Almond
3. Camphoraceous
4. Floral
  - Jasmine*
  - Lily of the valley*  
(*Muguet*)
  - Rose*
5. Fruit
  - Esters*
  - Miscellaneous*
6. Musk
  - Macrocyclic musks*
  - Nitro musk*
  - Non-nitro aromatic*  
*benzenoids*
  - Different families*  
*of musks*
7. Wood
  - Cedarwood*
  - Patchouli*
  - Sandalwood*

Various studies on the relation between the sensory properties and structural features of aromatic compounds have been carried out. Threshold values and odor qualities of a series of alicyclic and aromatic aldehydes have been investigated. It has been found that aldehydes bearing terminal phenyl or cycloalkyl substituents exhibit threshold minima at eight carbon atoms. A similar trend is observed for straight chain aliphatic aldehydes. Straight alkyl chains resulted in lower threshold values than the cyclic structures.

Compound	Allyl/Propenyl	Other Substituents	Sensory Quality
Methylchavicol	allyl	methoxyl	basil-like
Anethole	propenyl	methoxyl	anise-like
Eugenol	allyl	hydroxyl & methoxyl	clove-like
Safrole	allyl	dioxymethylene	sassafras-like
Benzaldehyde	aldehyde		Bitter almond-like
3-methoxy-4-hydroxybenzaldehyde	aldehyde	hydroxyl & methoxyl	Vanilla-like
3,4-dioxymethylenebenzaldehyde	aldehyde	methoxyl	Heliotrope-like

# FRAGRANCE PYRAMID

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## EVAPORATION

## DURATION

5 - 15 MINUTES



20 - 60 MINUTES



6 HOURS



FAST

MEDIUM

SLOW



## TOP

### CITRUS

- 🔥 Tangerine
- 🔥 Bergamot
- 🔥 Grapefruit
- 🔥 Mandarin
- 🔥 Melissa
- 🔥 Orange
- 🔥 Lime
- 🔥 Lemongrass

### HERBAL

- 💧 Thyme
- 💧 Clay Sage
- 💧 Peppermint
- 💧 Spraymint
- 💧 Eucalyptus
- 💧 Coriander
- 💧 Basil

## MIDDLE

### CITRUS

- 🔥 Nardoli

### HERBAL

- 💧 Chamomile
- 💧 Majoram
- 💧 Pine
- 💧 Rosemary

### FLORAL

- 💧 Geranium
- 💧 Lavender

### WOODSY

- 💧 Cypress
- 💧 Juniper

### SPICY

- 🔥 Black Pepper
- 🔥 Nutmeg

## BASE

### WOODSY

- 💧 Myrrh
- 💧 Sandalwood
- 💧 Cedarwood
- 💧 Balsam Fir

### FLORAL

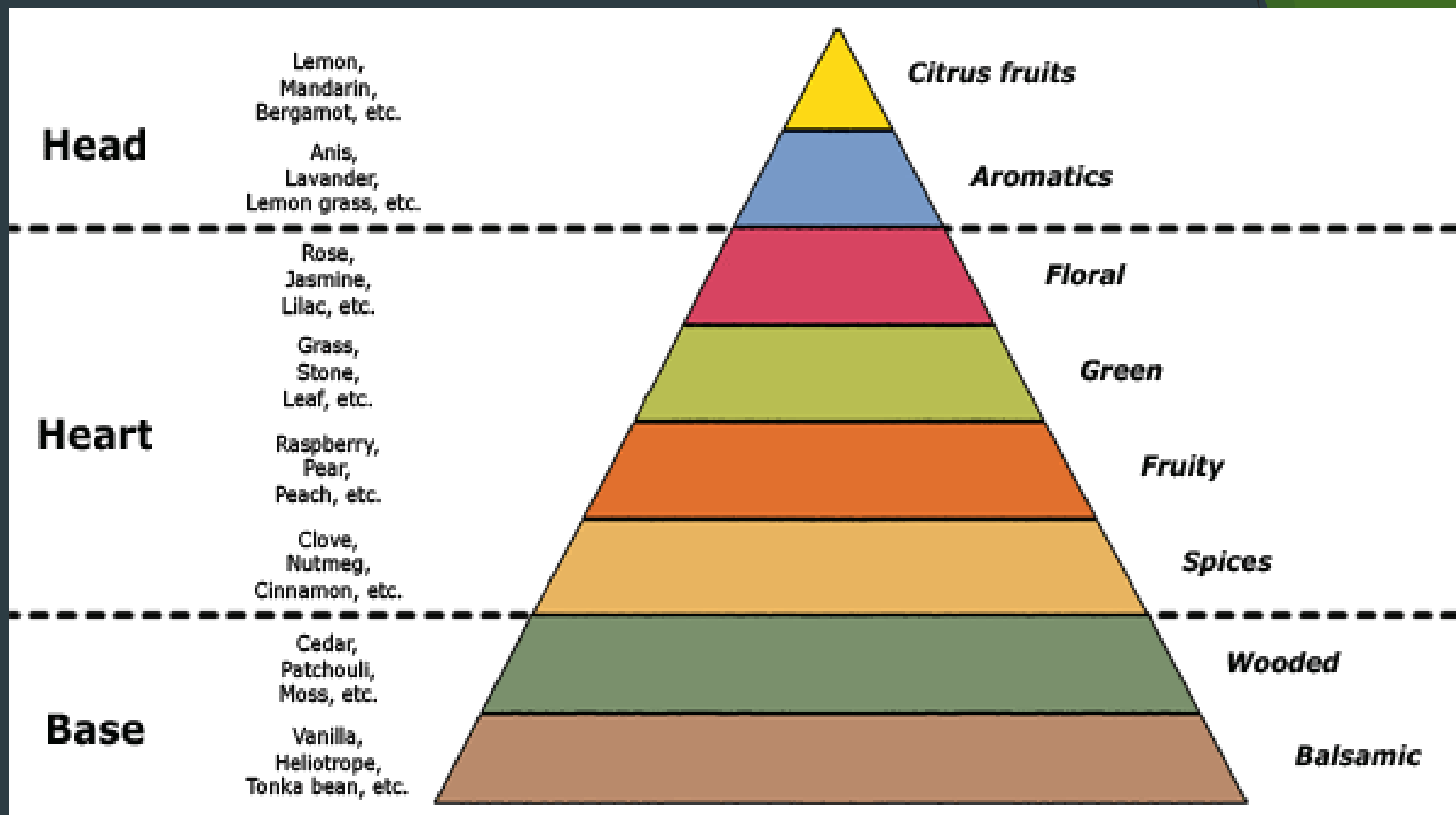
- 💧 Jasmine
- 💧 Rose
- 💧 Ylang Ylang

### SPICY

- 🔥 Cinnamon
- 🔥 Clove
- 🔥 Ginger

### EARTHY

- 🔥 Frankincense
- 🔥 Vetiver
- 🔥 Patchouli
- 🔥 Valerian



# Essential Oils Notes List

**Blending your EOs by notes: From the total drops you need, calculate 20% for base notes, 30% for top and 50% for middle notes.**

## Base Notes

Cedarwood	Ylang ylang
Cinnamon	Cassia
Oil of Guaiac	Clove
Myrrh	Ginger
Patchouli	Jasmine
Vetiver	Neroli
Angelica	Oak Moss
Sandalwood	Rose
Frankincense	Rosewood
Balsam of Peru	Valerian
	Vanilla

## Middle Notes

Geranium	Black Pepper
Clary Sage	Cardamom
Cloves	Chamomile
Marjoram	Cypress
Nutmeg	Ho Leaf
Palma Rosa	Yarrow
Pine	Juniper
Thyme	Lavender
Bay	Myrtle
Rosemary	Melissa

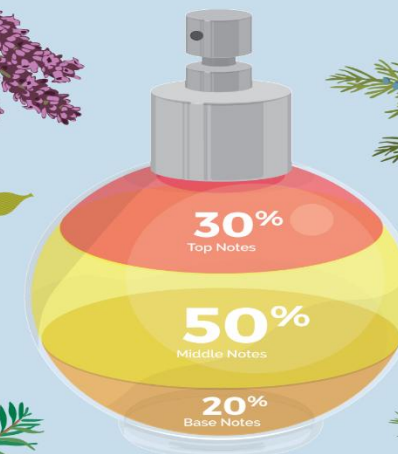
## Top Notes

Basil	Eucalyptus
Bergamot	Grapefruit
Noble-Chamomile	Hyssop
Chamomile	Lemongrass
Coriander	Lime
Cumin	Tangerine
Lemon	Verbena
Mandarin	Niaouli
Peppermint	Orange
Cajuput	Ravensara
Tea Tree	Spearmint

EssentialBazaar.com©

## Perfume 101

Top notes are what you smell first, and they fade faster. Middle notes are what you smell next and are considered the core of your fragrance. Base notes are what help the middle notes last longer, they accentuate and extend the longevity of the middle notes.



### Popular Top Notes



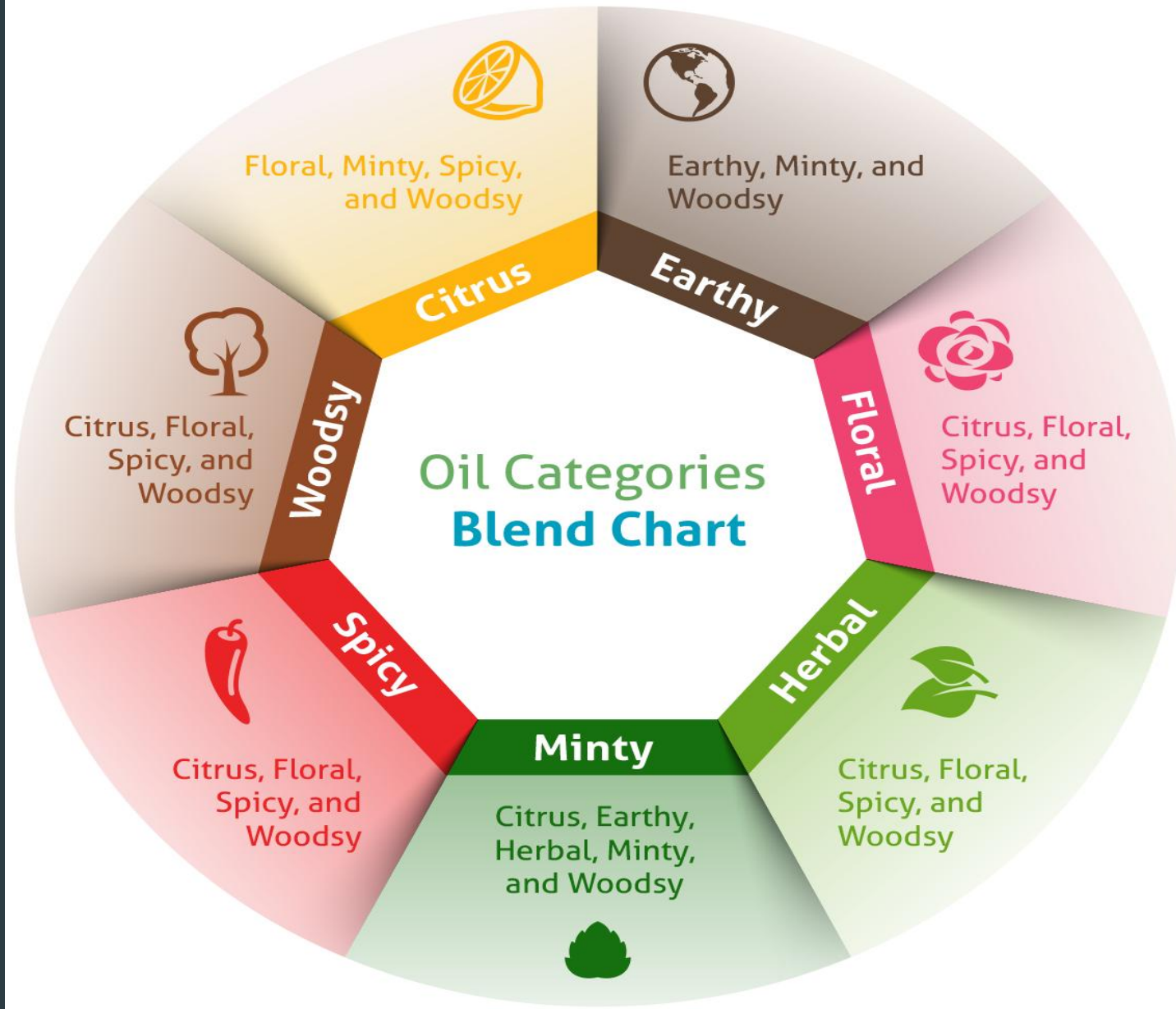
### Popular Middle Notes



### Popular Base Notes



Source: wikihow.com







TO CURE IS SOMETIMES  
TO RELIEVE IS OFTEN  
TO COMFORT IS ALWAYS

Untitled. Benjamin Lampson.  
Academic Medicine 2007;82:1112-3



Terima Kasih