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|                 | Aromatherapy, Evidence Based Research for Breast Health Julie Streeter, BSN, RN, HNB-BC, BCTMB Clinical Aromatherapist February 2, 2019 |

# Objectives

#### Participant will:

- $\bullet\,$  describe what an essential oil is and what it is not
- identify two essential oils, that are supported by evidence based research, that support breast health
- name two professional aromatherapy organizations to use as a resource for further information

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# **Essential Oils - Background**

- 1. Organic compounds from the glands or cells of aromatic plants
- 2. Derived from different plant parts
- 3. Produced through steam distillation, cold press, solvent extraction and CO2 extraction
- 4. Made of chemical constituents from different chemical families

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| Essential Oils – Cher   | nical Families | ;               |
|---|----------------|-----------------|
| Alcohols Aldehydes Esters Ethers and Oxides Ketones Lactones and Coumarins Phenols Terpenes | ON             | linalyl acetate |
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| Monoterpene   | es      | Monoterpenol  | s     | Esters             |       |
|---------------|---------|---------------|-------|--------------------|-------|
| β-myrcene     | 0.69    | α-terpineol   | 1.35  | eugenyl acetate    | 0.88  |
| β-ocimene     | 1.27    | borneol       | 1.16  | geranyl acetate    | 0.69  |
| δ-3-careen    | 0.18    | lavandulol    | 0.53  | hexyl acetate      | 0.43  |
| camphene      | 0.43    | linalol       | 27.43 | lavandulyl acetate | 2.24  |
| d-limonene    | 0.76    | terpinen-4-ol | 0.42  | linalyl acetate    | 46.98 |
| Sesquiterpen  | es      | Ketones       |       | Oxides             |       |
| β-caryophylle | ne 2.82 | camphor       | 0.73  | 1,8-cineole        | 1.58  |
| farnesene     | 0.67    | octanone      | 1.44  |                    |       |

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### **Essential Oils - Absorption**

Inhalation

directly from bottle inhalers/aromastick/patch diffusion



Topical

carrier application (2% dilution = 10-12 drops EO/oz carrier) bath (5-8 drops in 1 tsp shampoo)

Ingestion

not recommended unless prescribed by a physician

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### Side effects of cancer and cancer treatment

Symptom management

Anxiety Sleep

Nausea

Pain

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## **Essential Oils and Symptom Management**

## Anxiety

- Lavender *Lavandula angustifolia* 
  - Research:
    - (Dyer) 80% of patients who used a lavender blend aromastick for anxiety found benefit
    - (Jaruzel) The use of Lavender patches showed a statistically significant reduction in anxiety for pre-operative patients
    - (Johnson) Lavender decreased anxiety by 2.73 points on a 0-10 scale
    - (Ozkaraman) Lavender reduced trait anxiety in patients receiving chemotherapy
  - Application: Inhaler, diffuser or bath

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# **Essential Oils and Symptom Management**

#### Anxiety

- Sweet Marjoram *Origanum Majorana* 
  - Research:
    - (Johnson) Sweet Marjoram decreased anxiety by 2.73 points on a 0-10 scale
  - Application: Inhaler, diffuser or bath

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### **Essential Oils and Symptom Management**

#### Sleep

- Lavender *Lavandula angustifolia* 
  - · Research:
    - (Dyer) 71% of patients who used a lavender blend aromastick for sleep found benefit
    - (O'Malley) Lavender has a positive effect on sleep, rest and pain
    - (Ozkaraman) Lavender improved sleep quality in patients receiving chemotherapy
  - (Reis) Lavender may have a small to moderate benefit effect on sleep
  - Application: Inhaler, diffuser or bath

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## **Essential Oils and Symptom Management**

### Nausea

- Ginger Zingiber Officinale
  - Research:
    - (Asay) The systematic review showed evidence to support the use of aromatherapy for post-op nausea/vomiting
    - $-\,$  (Dyer) 82% of patients used a ginger blend aromastick for nausea found benefit
  - (Johnson) Ginger decreased nausea by 2.02 points on a 0-10 scale
  - $\bullet$  Application: Inhaler or diffuser, \*do not use in a bath\*

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# **Essential Oils and Symptom Management**

#### • Pain

- Sweet Marjoram *Origanum Majorana* 
  - - (Johnson) Sweet marjoram decreased pain by 3.31 points on a 0-10 scale
  - Application: Inhaler, diffuser or bath
- Lavender Lavandula angustifolia

  - Research:
     (Johnson) Lavender decreased pain by 3.22 points on a 0-10 scale
     (O'Malley) Lavender has a positive effect on sleep, rest and pain
  - Application: Inhaler, diffuser or bath

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# **Professional Organizations**

National Association for Holistic Aromatherapy NAHA naha.org

Alliance of International Aromatherapists alliance-aromatherapists.org

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# Questions?

Julie Streeter, BSN, RN, HNB-BC, BCTMB Clinical Aromatherapist

Julie.Streeter@allina.com



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