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Malaysia

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BRINGING EDUCATION AND UNDERSTANDING TO YOU



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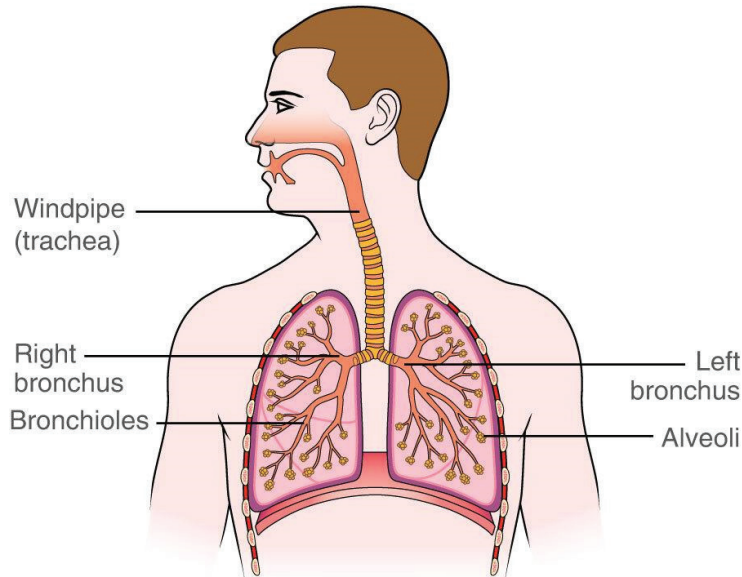
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I What is lung cancer?

- **Lung cancer** occurs when cells in the lungs grow out of control and start changing in an abnormal way.¹



- Lung cancer can occur in any part of the **lower respiratory tract (also known as lower airway)**, namely the **trachea, bronchus, bronchioles**, or the **alveoli**.²



References:

1. Centers for Disease Control and Prevention. What is lung cancer? [Internet]. 2021 [cited on 2022 Oct 25]. Available from: https://www.cdc.gov/cancer/lung/basic_info/what-is-lung-cancer.htm
2. Cancer Research UK. What is lung cancer? [Internet]. 2022 Dec 7 [cited on 2022 Dec 25]. Available from: <https://www.cancerresearchuk.org/about-cancer/lung-cancer/what-is>

I How common is lung cancer?

Lung cancer is the number **2** most common cancer among men in Malaysia and the number **4** most common cancer among women in Malaysia.³

About **9 out of 10** lung cancer cases in Malaysia were **diagnosed late in stage 3 and stage 4** between 2012 and 2016, making it difficult for effective treatment.³



People whose lung cancer are detected in

Stage **1** and **2** have a **37%** and **17%**
five-year survival rate*⁴

Stage **3** and **4** have a **8%** and **6%**
five-year survival rate*⁴

*The percentage of patients who are alive 5 years after diagnosis.

The sooner the cancer is detected, the higher your chances of survival.

References:

3. Azizah A, Hashimah B, Nirmal K, Siti Zubaidah A, Puteri N, Nabihah A et al. Malaysia National Cancer Registry Report (MNCR) 2012-2016. Putrajaya, Malaysia: Ministry of Health Malaysia; 2019.

4. National Cancer Registry, National Cancer Institute, Ministry of Health Malaysia (2018). Malaysian Study on Cancer Survival (MySCan).

I Who is at risk of lung cancer?



References:

5. American Cancer Society. Lung Cancer Risk Factors [Internet]. 2019 [cited on 2022 Oct 25]. Available from: <https://www.cancer.org/cancer/types/lung-cancer/causes-risks-prevention/risk-factors.html>

I What are the signs and symptoms of lung cancer?

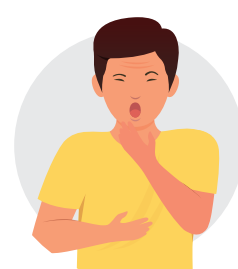
Signs and symptoms of lung cancer⁶



Prolonged coughing that worsens or does not improve



Unexplained weight loss



Difficulty in breathing



Coughing up blood



Continuous and unexplained tiredness



Chest pain



Wheezing

The difference between signs and symptoms:

Signs are what others see (e.g. swelling and bleeding),
symptoms are what you feel (e.g. headache and pain).⁷

TALK TO YOUR DOCTOR IF YOU NOTICE ANY OF THESE CHANGES

References:

6. Centers for Disease Control and Prevention. Lung Cancer: What are the symptoms? [Internet]. 2021 [cited on 2022 Oct 25]. Available from: https://www.cdc.gov/cancer/lung/basic_info/symptoms.htm

7. American Cancer Society. Signs and symptoms of cancer [Internet]. 2020 Nov 6 [cited on 2022 Dec 28]. Available from: <https://www.cancer.org/treatment/understanding-your-diagnosis/signs-and-symptoms-of-cancer.html>

I How do I find out if I have lung cancer?

- People who are at a **high risk** of getting lung cancer should be screened for lung cancer, even though they show no symptoms.⁸

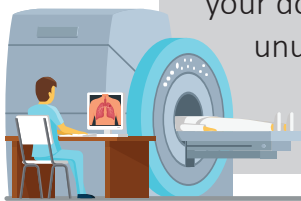
High-risk individuals⁹:

- people who are aged 50 and above, **and**
- have 20 or more pack-years* of smoking history, **and**
- have other risk factors such as
 - a personal history of cancer; or
 - a family history of lung cancer; or
 - a history of chronic obstructive pulmonary disease (COPD) or pulmonary fibrosis; or
 - exposure to substances such as radon and asbestos

Ways to get checked for lung cancer⁹:

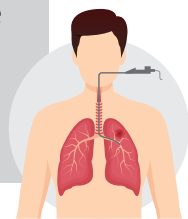
Low-Dose Computed Tomography (CT) scan:

An imaging procedure using low-dose radiation to create a detailed image of the lungs, which allows your doctor to check for unusual growths.



Bronchoscopy Biopsy:

If necessary, a bronchoscopy biopsy may be performed. A sample of tissue from your lungs is taken and sent to a laboratory to determine whether it is cancerous.



BASED ON THE RESULTS, YOUR DOCTOR WILL ADVISE ON THE NEXT STEPS

*Pack-years¹⁰:

A method to measure how much a person has smoked over a period of time.

Pack-years = number of packs of cigarettes smoked per day x number of years of smoking

Example: 20 pack-years = smoking 1 pack (20 cigarettes) daily for 20 years, or 2 packs daily for 10 years

References:

8. Centers for Disease Control and Prevention. Who should be screened for lung cancer? [Internet]. 2022 Oct 25 [cited on 2022 Dec 25]. Available from: https://www.cdc.gov/cancer/lung/basic_info/screening.htm

9. National Comprehensive Cancer Network (NCCN). Lung Cancer Screening: NCCN Guidelines for Patients. Plymouth Meeting, PA (US): NCCN; 2020. 44 p. Report No.: 1

10. American Cancer Society. Definition of pack year [Internet]. [cited on 2022 Dec 28]. Available from: <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/pack-year>

I How do I protect myself from lung cancer?



Don't smoke

About 90% of lung cancer cases are linked with smoking (cigarettes or other tobacco products)¹¹



Avoid secondhand smoke

Being exposed to secondhand smoke increases a person's risk of lung cancer¹²



Ensure your home and workplace are free from harmful substances

Avoid breathing in harmful substances that could lead to lung cancer such as cigarette smoke, radon, and asbestos¹¹

References:

11. Centers for Disease Control and Prevention. What can I do to reduce my risk of lung cancer? [Internet]. 2022 [cited on 2022 Oct 25]. Available from: https://www.cdc.gov/cancer/lung/basic_info/prevention.htm

12. National Cancer Institute. Lung Cancer Prevention (PDQ) - Health Professionals Version [Internet]. 2022 Apr 22 [cited on 2022 Dec 25]. Available from: <https://www.cancer.gov/types/lung/hp/lung-prevention-pdq>

I **Myths on** smoking and lung cancer

1



Myth:

I've been smoking for too long, **even if I stop smoking now, it won't reduce my risk of lung cancer.**¹³

Truth:

You can still reduce your risk. The earlier you quit, the better it is. People who quit before age 30 may reduce their chances of dying from lung cancer by more than 90%. If a smoker quits by age 50, this risk can be reduced by 50%.¹³

2



Myth:

I want to quit smoking, but **I've heard that nicotine replacement products might also cause cancer.**¹³

Truth:

No studies have linked **nicotine replacement therapy with cancer.** In fact, this therapy helps reduce our **exposure to cancer-causing chemicals found in cigarettes.**¹³

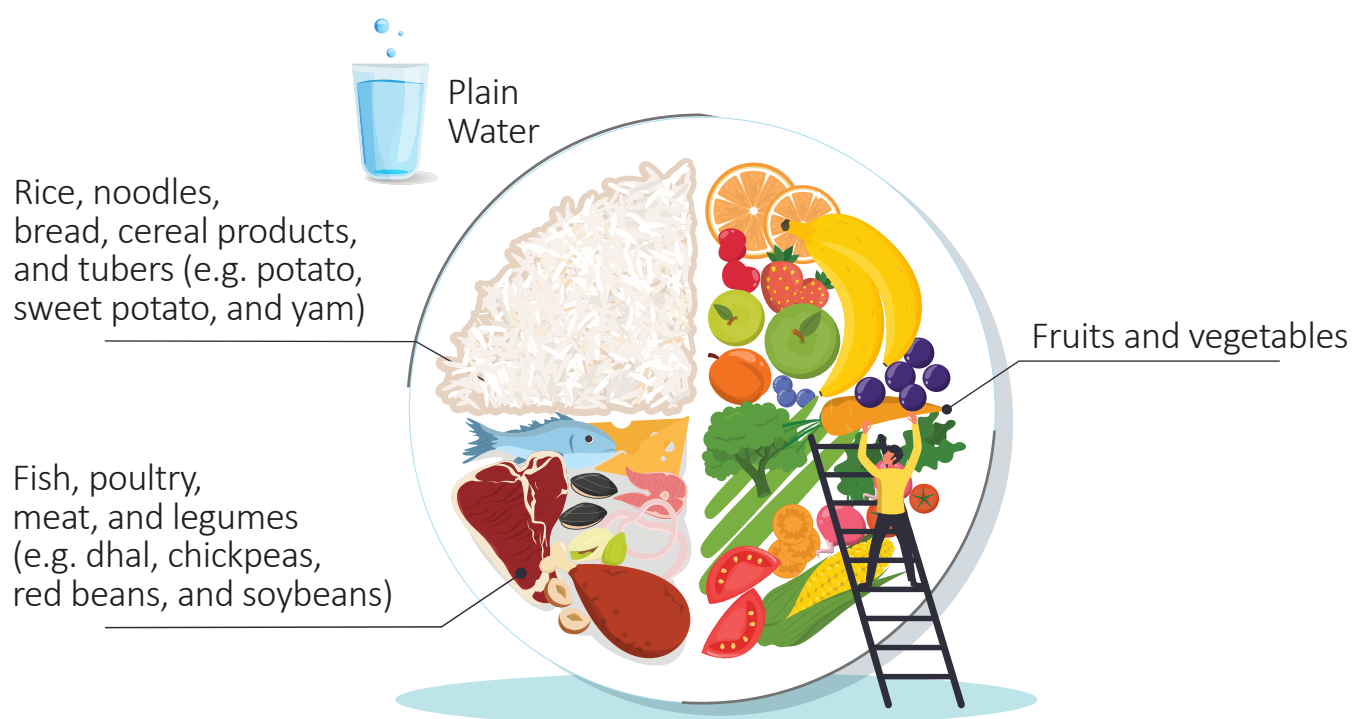
References:

13. Johns Hopkins Medicine. "Myths About Smoking and Lung Cancer" [Internet]. [cited on 2022 Oct 31]. Available from: https://www.hopkinsmedicine.org/kimmel_cancer_center/cancers_we_treat/lung_cancer_program/myths_about_smoking_and_lung_cancer.html

I How do I protect myself from cancer in general?

Eat Healthy

The diagram below shows the **Malaysian Healthy Plate with Quarter Quarter Half concept**.
Use this as a visual guide to healthy, balanced meals.¹⁴



Recommendation for the following food products:

	Red meat	Less than 500g/week = 3 palm sizes of meat in total ¹⁵		2 servings of fruits and 3 servings of vegetables daily¹⁵	E.g., eat 1 apple + 1 slice watermelon + 12 tablespoons of cooked leafy vegetables/day
	Processed meat	Avoid completely ¹⁵		Sugar sweetened drinks	Avoid completely ¹⁵
	More than 2 servings of wholegrain daily¹⁵	E.g., eat at least 2 slices brown bread + 0.5 cup cooked brown rice/day		Processed foods	Less than once a week or avoid completely ¹⁵

References:

14. Panduan Pinggan Sihat Malaysia. Putrajaya (MY). Ministry of Health Malaysia; 2016. 50 p. Report No.: 1.

15. World Cancer Research Fund/American Institute for Cancer Research. "Continuous Update Project Expert Report 2018.

Recommendations and public health and policy implications." [Internet]. [cited on 2022 Nov 17]. Available from: dietandcancerreport.org

I How do I protect myself from cancer in general? (continued)

Be Active



150 Minutes

Moderate-intensity* aerobic activity per week¹⁶

Brisk walking, jogging, swimming, tennis (doubles), cycling, hiking, line dancing

or



75 Minutes

Vigorous-intensity** aerobic activity per week¹⁶

Running, swimming laps, tennis (singles), jumping rope, aerobic dance, kickboxing

and



At least 2 days

of muscle strengthening activities per week¹⁶

Use of exercise bands, weight machines, or hand-held weights; push-ups, pull-ups, planks, squats, lunges, some yoga postures and tai chi

How do you measure intensity?

Use the 'talk test'

*Moderate-intensity exercise	Moderate effort required. You breathe harder, you start to sweat, and you will talk more slowly than you do normally. ¹⁷
**Vigorous-intensity exercise	High effort required. You are puffing, sweating, and can only talk with pauses. ¹⁷

References:

16. World Health Organization. Physical Activity [Internet]. [cited on 2022 Nov 17]. Available from: <https://www.who.int/news-room/fact-sheets/detail/physical-activity>

17. Cancer Council Australia. "Exercise for people living with cancer" [Internet]. 2019. [cited on 2022 Nov 17]. Available from: <https://www.cancer.org.au/assets/pdf/exercise-for-people-living-with-cancer>

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