

# Can Cancer Be Prevented?

## Know Your Enemies Before They Hit You

能预防癌症吗?  
知己知彼战胜癌症

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# The Fight Against Cancer is a Battle

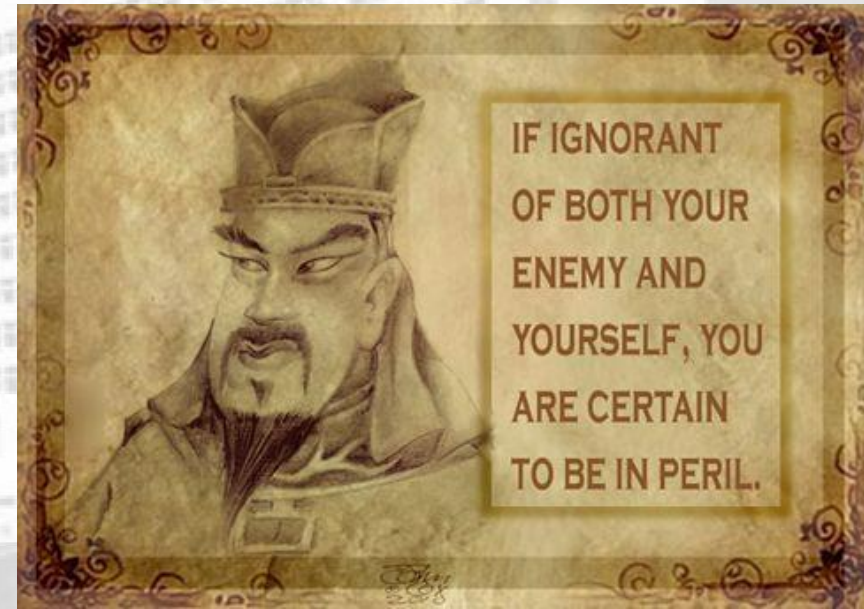
## 对抗癌症就如同一场战争

故曰：知彼知己，百戰不殆；不知彼而知己，一勝一負；不知彼，不知己，每戰必殆。

So it is said that if you know your enemies and know yourself, **you can win a hundred battles without a single loss**

If you only know yourself, but not your opponent, you may win or may lose

If you know neither yourself nor your enemy, you will always endanger yourself

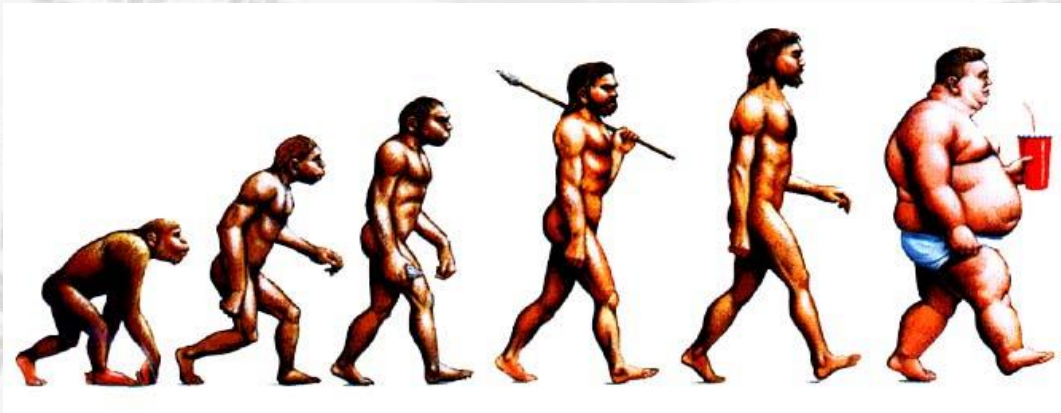


**Sun Tzu's *Art of War***

- What should I **avoid** to prevent cancer?  
我应该如何预防癌症?
- What should I **actively do** to prevent cancer?  
应该做些什么以积极地预防癌症?
- What should I **do** about things I **cannot avoid**?  
那些无法避免的事情，我该怎么办？

# Did Cavemen Get Cancer?

## 原始人有患上癌症吗？



There is very little evidence  
that cavemen suffered  
cancer

有很少的证据说明原始人  
患上癌症。

They ate natural food but  
also had shorter lives

因为他们吃天然食品，而且  
有较短的生命

# Cancer Causation

## 癌症病因

- It is estimated that 80% of cancer **can be prevented**  
据估计，80%的癌症是**可以预防的**
- 30% of cancer deaths are due to the five leading **behavioral and dietary risks**  
30%的癌症死亡是由于首五项**行为和饮食风险**所导致的
- **Smoking** is the most important risk factor for cancer causing 22% of global cancer deaths  
**吸烟**是导致22%的全球癌症死亡人数，最重要的风险因素
- **Viral infections** are responsible for up to 20% of cancer deaths in low- and middle-income countries  
在低至中等收入国家 20%的癌症死亡是由**流感**造成的

What should I **avoid** to prevent  
cancer?

我应该如何预防癌症?

## International Agency for Research on Cancer



- The IARC lists various substances for their potential to cause cancer  
国际癌症研究机构列出含有导致癌症风险的各种物质
- Agents, mixtures and exposure circumstances  
药剂,混合物与接触的情况

Class 1: Causes cancer

Class 1:导致癌症

Class 2A: Probably causes cancer

Class 2A:可能会导致癌症

Class 2B: Possibly causes cancer

Class 2B:也许会导致癌症

# IARC Carcinogens (selected)

|                                 | Class 1  | Class 2A   | Class 2B   |
|---------------------------------|--|--|--|
| Agents<br>药剂                    | <b>Viruses, Ethanol,</b><br>Solar radiation, Hormonal medication, Dyes,<br><i>Helicobacter Pylori</i><br><b>病毒，乙醇，</b><br>太阳能辐射，激素药物，<br>染料，幽门螺旋杆菌 | (Various chemicals)<br>(各种化学品)                               | (Various chemicals)<br>(各种化学品)                             |
| Mixtures<br>混合物                 | <b>Tobacco, Betel nut, Salted fish,</b> Diesel exhaust,<br><b>烟草，槟榔，咸鱼，</b> 柴油车排气  | Insecticides,<br><b>Biofuels</b><br>杀虫剂， <b>生物燃料</b>         | <b>Talc-based body powders, Coffee</b><br>滑石粉粉末， <b>咖啡</b> |
| Exposure circumstances<br>接触的情况 | Furniture, Painting, Dye, Rubber industries<br>家具，绘画，染料，橡胶等行业  | Hairdressing, Petroleum refining, Shift work<br>美发业，石油炼制轮班工作 | Printing, Dry-cleaning<br>印刷，干洗                            |



# Smoking and Cancer

## 吸烟与癌症

- Smoking increases risk of lung cancer by 14 x and larynx cancer by 15 x


吸烟使患上肺癌的风险增加至14 倍  
及患上喉癌的风险增加至 15 倍

- Smoking prevalence in Singapore has **increased** from 12.6% in 2004 to 14.3% in 2010

新加坡的吸烟率从2004年的12.6%  
**上升**至2010 的14.3%





# Smoking Cessation 戒烟





**Treating Tobacco Use and Dependence**


**HPB-MOH Clinical Practice Guidelines 1/2013**


  
 Academy of Medicine, Singapore


  
 College of Family Physicians, Singapore


  
 MINISTRY OF HEALTH SINGAPORE  
 Ministry of Health, Singapore


  
 Singapore Armed Forces Medical Corps

  
 Pharmaceutical Society of Singapore

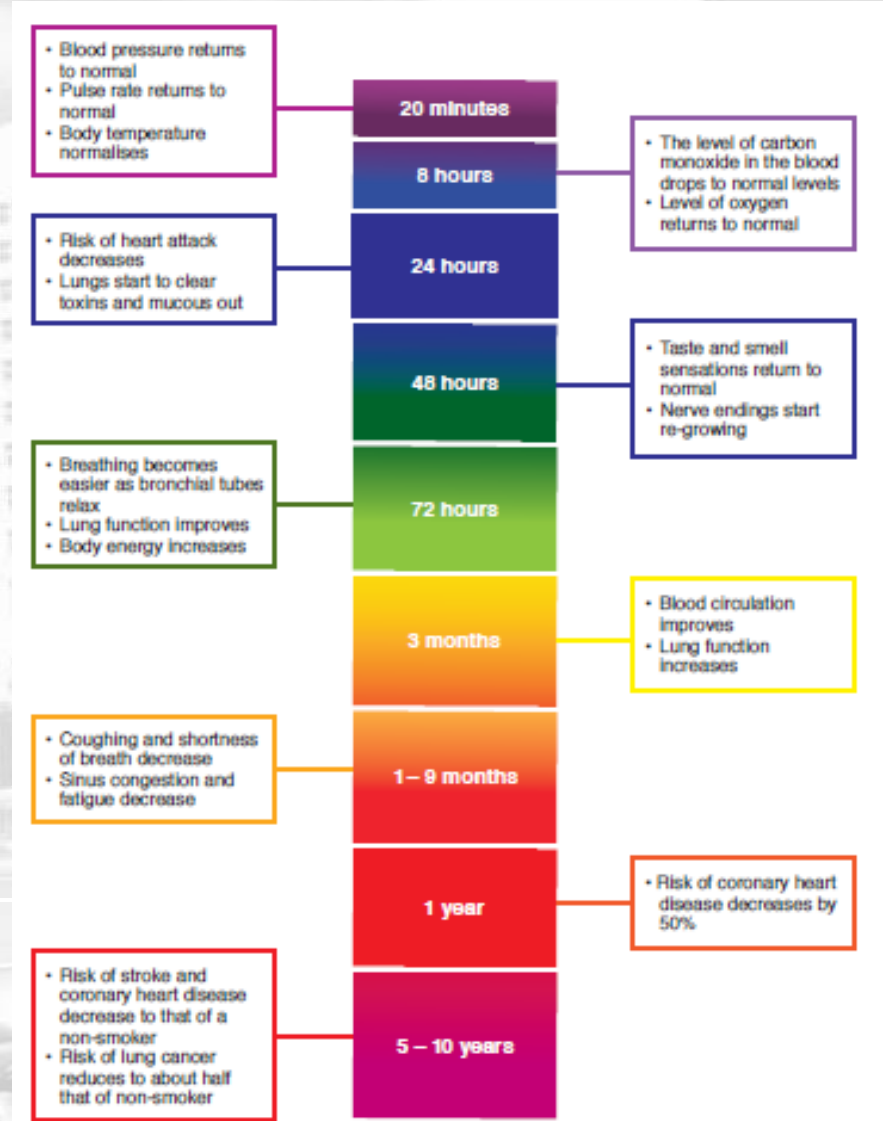
  
 Singapore Dental Association

  
 Singapore Medical Association

  
 Singapore Nursing Association

  
 Singapore Psychological Society (Incorporated 1974)  
 Singapore Psychological Society

May 2013



# Smoking Cessation 戒烟

- All tobacco users should be offered **behavioural support** and **medication** to help quit

所有吸烟者应得到行为上的支持和药物来帮助戒烟

- 8-12 weeks of **nicotine replacement therapy** (e.g. gum) is recommended

建议: 进行8至12周的尼古丁替代疗法 (如口香糖)

- Two drugs are effective:

这两种药物是有效的:

- **Champix** (21%vs 8%)
- **Wellbutrin SR** or **Zyban** (17% vs 7%)

- Hypnotherapy, Acupuncture and electronic-cigarettes not recommended

不推荐:催眠疗法, 针灸和电子香烟

# Other inhaled substances

## 我们吸入的其他有害物质

- Haze  
烟雾
- Car exhaust fumes  
汽车排出的废气
- Household cleaners  
家用清洁剂
- Fogging for dengue ?  
预防登革热 所喷的雾？



# Alcohol 酒精

- The risk of head and neck cancers (mouth, throat and larynx) increase by 2-3 x in those who drink 3-4 drinks a day  
每天饮用 3-4 杯含酒精的饮品会增加患上头颈癌的风险至3-4倍
- Smoking + drinking increase this risk  
吸烟加上过量饮酒增加患上头颈癌的风险
- The risk remains even 16 years after giving up alcohol  
即使戒酒16年后患上头颈癌风险依然存在



# Alcohol 酒精

- Are some alcoholic drinks better than others?

有些含酒精成分的饮料是否比别的来得好?



- Can some people handle alcohol better than others?

有些人比一般人对酒精更敏感?



# Cancer-causing food!

## 导致癌症的食物！

- Eating **red meat** increases your risk of cancer death by 10%

吃**红肉**会提高癌症死亡的风险于10%

- Eating **processed meats** increased risk of cancer death by 16%

食用**加工肉类**，癌症死亡的风险增加16%

- **Fatty food** increases risk of cancer e.g. breast cancer

**含高脂肪的食物**会增加患癌症的风险，  
例如乳腺癌

- **Preserved foods** e.g. salted fish increase risk of NPC

**腌制食品**如咸鱼增加患鼻咽癌  
的风险

- **High salt** diet increases your risk of cancer

**含高盐分的**饮食会增加患癌症  
的风险

# Cancer-causing food!

## 导致癌症的食物！

**If you think eating healthy is expensive...**



**you haven't priced cancer lately.**



# Stop Press!

- Recent studies show that high levels of **Omega-3 fatty acids** in the blood increase risk **prostrate cancer** by 43%, and high-grade prostrate cancer by 71%!
- 近期研究显示，血液中含有较高的Omega-3脂肪酸会增加患上前列腺癌的风险至43%，增加患上严重前列腺癌的风险至71%  
！



# Radiation 辐射

- Fukushima and Chernobyl 福岛县和切尔诺贝尔核电厂
- Sunlight 阳光
- CT scans CT扫描
- Mobile phones? 手机?



# Infections and Viruses

## 传染病与病毒

- Hepatitis B and C  
B型肝炎和C型肝炎
- Epstein-Barr Virus  
爱泼斯坦巴尔病毒
- Human Papilloma  
Virus  
人类乳头状瘤病毒



# Hormone Replacement Therapy

## 激素替代治疗

- **Hormone replacement therapy** taken at menopause is associated with increased risk of cancer  
激素替代治疗是在更年期进行的，并与患上癌症的风险增加息息相关
- Rates of uterine (endometrial), ovarian and breast cancer are increased  
子宫癌,卵巢癌和乳腺癌的几率增加

### Million women study 百万妇女研究

#### **Combined oestrogen and progesterone HRT:**

结合雌激素和孕激素的激素替代治疗：

**19** extra cases of breast cancer in 1000 women taking HRT for 10 years

1000名妇女服用为期10年的激素替代治疗中有额外的19名妇女患乳腺癌

#### **Oestrogen only HRT:**

孕激素的激素替代治疗

**5** extra cases of breast cancer in 1000 women taking HRT for 10 years

1000名妇女服用为期10年的激素替代治疗中有额外的5名妇女患乳腺癌

What Should I **Actively Do** to Prevent  
Cancer?

应该做些什么以积极地预防癌症?

# 5 Things You Can Do

## 你能做的5件事



# You are what you eat!

## 您的饮食与您有关

- High fibre 高纤维
- Low fat 低脂肪
- Fresh fruit and vegetables  
新鲜水果与蔬菜



# Are they 'special foods'?

他们是“特殊的食物”吗？

- **Anti-oxidants** 抗氧化剂

- Beta-carotene (orange coloured fruits / veg)

β-胡萝卜素 (橙色水果/蔬菜)

- Lutein (green veg) 叶黄素 (青菜)

- Lycopene (watermelon, papaya, guava) 番茄红素 (西瓜, 木瓜和番石榴)

- Selenium (nuts) 含硒 (坚果)

- Vitamins A, C and E 维他命A, C和E



**Chinese Wolfberry or  
Gouqi / Goji Berry 枸杞子**





Apricots



Cantaloupe



Mango



Nectarines



Oranges



Papaya



Peach



# Anti-Cancer Superfruits

Dave Sommers Nutrition Solution Lifestyle



Tangerines



Butternut Squash



Carrot



Sweet Potatoes



Orange Peppers



Orange



Blueberries



Goji Berries



Grapes



Mangosteen



Avocado



Noni



Dragon Fruit



Acai Berries



Soursop



Apple



Citrus



Pomegranate



Strawberries



Kiwi

# Vaccination 疫苗

- Two types of vaccination are available for HPV

有两种接种人类乳头状瘤病毒（HPV）疫苗

- HPV causes gynae, anal and throat

(tonsil and tongue base) cancers

人类乳头状瘤病毒会导致妇科，肛门和咽喉（扁桃腺和舌根）等癌症

- Medisave will **reimburse \$400/-** for women aged 9-27 years

保健储蓄将为年龄在9-27岁的妇女偿还\$ 400 / -



What should I **do** about things I  
**cannot avoid**?

那些无法避免的事情，  
我该怎么办？



# Friends – you can choose, Family – you can't!

您能选择您的朋友，  
但您不能选择您的家人



- **Screening** 癌症筛查

- NPC: Screening for people with 2 relatives with NPC

鼻咽癌:有两位以上的亲属患上鼻咽癌需进行筛查

- Colorectal: Screening from 50

结肠直肠癌:五十岁以上需进行筛查

- Breast: Mammogram every 2 years 50-69; Annually for 40-49

乳腺癌:乳房X光检查, 50-69岁每2年进行筛查; 40-49岁每年进行筛查

- Cervix: Pap smear every 3 years, < 25 years

宫颈癌:子宫颈涂片检查, < 25岁每3年进行筛查

# Can cancer be prevented?

## 癌症可以预防吗？

# Yes! 可以!

### Know yourself and know your enemies!

### 知己知彼，战胜癌症！



Thank you  
谢谢您

