

CANCER  
PREVENTION  
2017 癌症預防

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- TRUE SCIENCE 真正的科學
- PSEUDOSCIENCE 偽科學
- POP SCIENCE 流行科學

# BIBLE 聖經

A SIMPLE MAN BELIEVES ANYTHING BUT A  
WISE MAN GIVES THOUGHT.

PROVERBS 14:15

箴 14:15 愚蒙人是話都信；通達人步步謹慎

**CANCER CAUSES**

**癌症的原因**

# CANCER CAUSES 癌症的原因

1. CHEMICAL & PHYSICAL AGENTS 化學與物理因素
2. LIFESTYLES: 1/3 CANCER DEATH 生活方式: 1/3癌症死亡
3. INFECTIONS: 1/5 CANCER DEATH 感染: 1/5癌症死亡
4. RADIATIONS 輻射
5. HORMONES 激素
6. NEUROPSYCHOLOGICAL 神經心理學
7. AUTOIMMUNE DISEASES 自發性疾病

# 1. CHEMICAL & PHYSICAL AGENTS 化學與物理因素

- TOBACCO: 4/1 CANCER DEATH, 煙草: 4/1癌症死亡  
> 50 CARCINOGENS > 50 致癌物質
- ASBESTOS, GLASS WOOL ETC 石棉, 玻璃棉等
- PCB: RID CODES 2,4,5 OK 多氯聯苯化合物
- BPA, NAPHTHYLAMINE: DYE AND RUBBER WORKERS 双酚A, 萘胺: 染色和橡膠工人
- BENZENE 苯

## 2. LIFESTYLES 生活方式

- DIET: OBESITY, MALNUTRITION 飲食: 肥胖, 營養不良
- FOODS : FAT, RED MEATS, FOOD CONTAMINANTS & ADDITIVES: AFLATOXIN, SALT, NITRITES, ETC. 食物: 脂肪, 紅肉, 食物污染物和添加劑: 黃曲霉毒素, 鹽, 中亞硝酸鹽
- BETEL, ALCOHOL 檳榔, 酒
- GENETICALLY MODIFIED FOODS 基因改造食物
- PHYSICAL ACTIVITIES 體力活動
- DRINKING: SCALDING HOT TEA 喝滾燙的熱茶

### 3. INFECTIONS 感染

- VIRUS: LIVER CANCER, CERVICAL CANCER, NASOPHARYNGEAL CANCER, LEUKEMIA ETC  
病毒: 肝癌, 子宮頸癌, 鼻咽癌, 白血病等
- BACTERIA: STOMACH CANCER 細菌: 胃癌
- PARASITES: BILE DUCT CANCER, BLADDER CANCER 寄生蟲: 膽囊癌, 膀胱癌



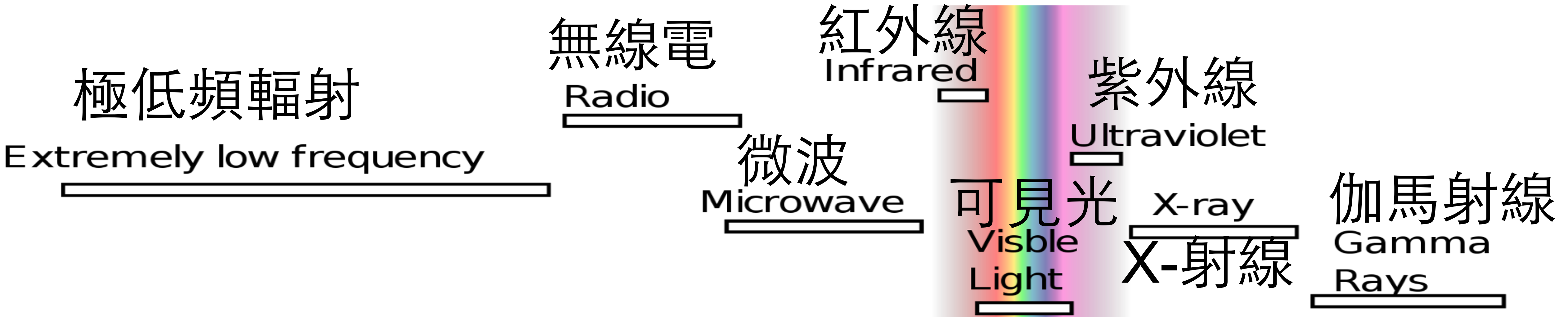
## 4. RADIATION 輻射

- IONIZING RADIATION: MEDICAL IMAGING, RADON GAS 游離輻射: 醫學影像, 氡氣
- NON IONIZING RADIATION: UV, MOBILE PHONE ?, NUCLEAR POWER, ELECTRIC POWER TRANSMISSION?  
非游離輻射: 紫外線, 手機, 核能源, 電力傳輸?

# RADIATION 輻射

Non-ionising 非游離輻射

游離輻射  
ionising



Non-thermal	Thermal	Optical	Broken Bonds
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Induces  
Low  
Currents

低電流 高電流

Induces  
High  
Currents

Excites  
Electrons

Damages  
DNA

???

Heating

Photo  
Chemical  
Effects

Static  
Field

Power  
Line

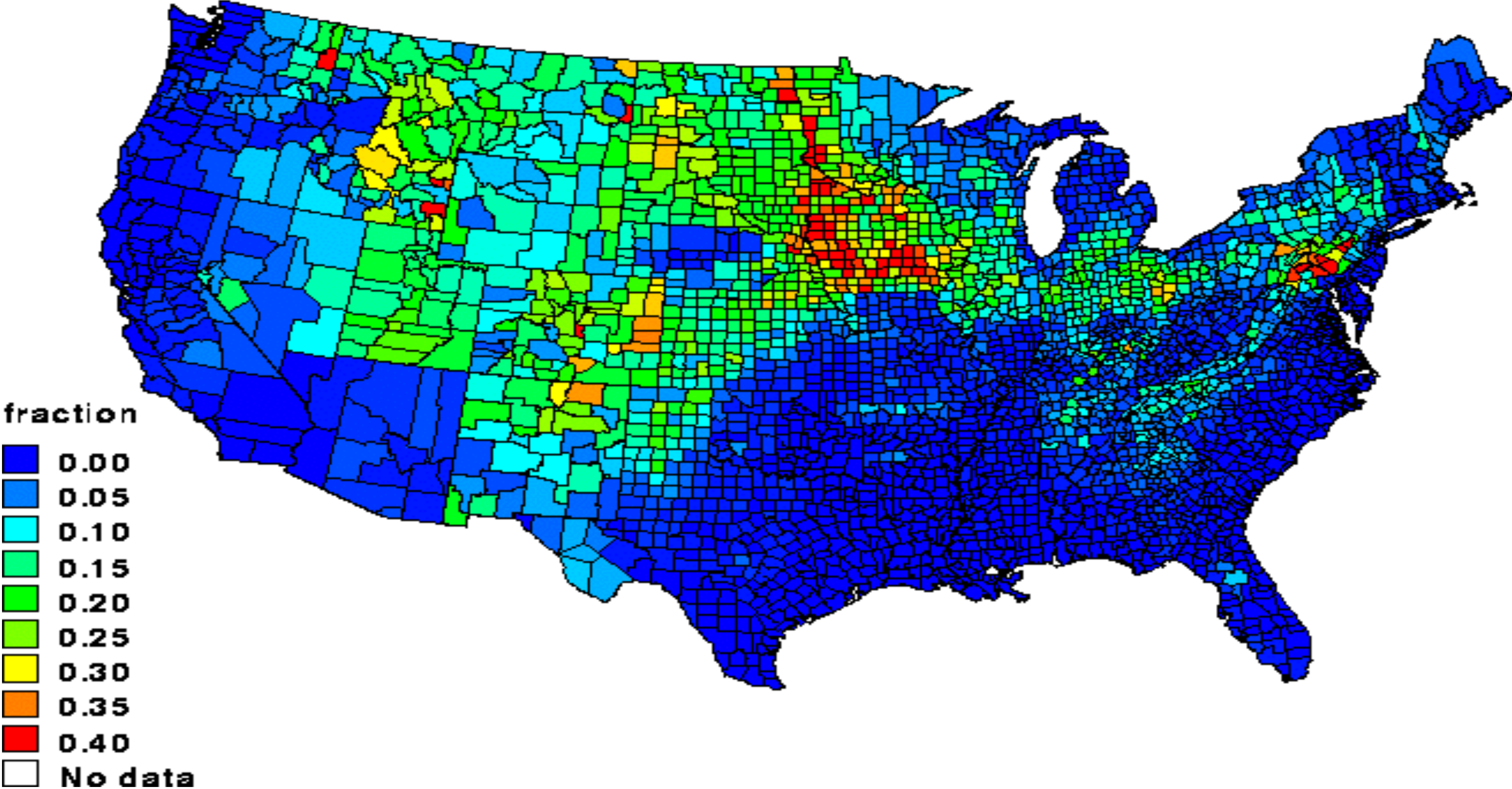
AM FM Wfi  
Radio Radio

Tanning  
Booth

Medical  
X-ray

# RADON IN US 氡氣

Predicted fraction of homes over 4 pCi/L



# 5. HORMONES 激素

- ESTROGEN 雌激素
- PROGESTERONE 孕酮 (黃體素)
- TESTOSTERONE 睾酮
- INSULIN LIKE GROWTH HORMONE 胰島素樣生長激素
- INSULIN 胰島素
- GROWTH HORMONE 生長激素

## 6. NEUROPSYCHOLOGICAL 神經心理學

- STRESS 壓力
- ANXIETY 焦慮
- DEPRESSION 憂鬱症

# 7: AUTOIMMUNE DISEASES

## 自發性疾病

- CELIAC DISEASE 乳糜瀉
- ULCERATIVE COLITIS 潰瘍性結腸炎

# BIBLE 聖經

A CHEERFUL HEART IS GOOD MEDICINE BUT A  
CRUSHED SPIRIT DRIES UP THE BONES.

PROVERB 17: 22

箴 17:22 喜樂的心乃是良藥；憂傷的靈使骨枯乾。

# CANCER PREVENTION 癌症預防:

1. AVOIDING CANCER CAUSING AGENTS AND BEHAVIORS 避免致癌因素和行為
2. FOODS, VITAMINS ETC: HIGH FIBERS, FISH AND OMEGA 3, SOY, TOMATO, FRUITS AND VEGETABLES  
食品, 維生素等: 高纖維, 魚, 歐米茄3, 大豆, 番茄, 水果和蔬菜
3. MEDICATIONS: ASPIRIN, MOTRIN, TAMOXIFEN, RALOXIFENE, DUTASTERIDE, METFORMIN ETC  
藥物: 阿斯匹靈, 美林, 三苯氧胺, 骨質疏鬆新藥RALOXIFENE芬, 5甲型還原酶抑制劑, 降血糖藥METFORMIN等
4. VACCINATION 疫苗接種



# CONTROVERSIES IN WATER AND FOODS 水和食物

- PURIFIED WATER 淨化水
- ORGANIC FOODS 有機食品
- SUPPLEMENTS 補助食品：PHYTOCHEMICALS 植物化學物質, FLAVONOID 黃酮, TURMERIC 薑黃, GARLIC 大蒜, ETC
- SUGAR SUBSTITUTES 代糖: ASPARTAME 阿斯巴甜, SACCHARIN 糖精, STEVIA 甜菊糖, AGAVE 龍舌蘭糖漿
- GENETICALLY ENGINEERING FOODS 基因工程食品

# WATER PURIFICATION 水的淨化

- TAP WATER 自來水: PH 氫離子濃度, MINERALS 礦物質, CHLORINE 氯, FLUORIDE 氟, CHLORAMINE 氯胺淨水劑
- WATER SOFTENING 軟化 VS WATER CONDITIONING 調節
- ACTIVATED CHARCOAL FILTERING 活性炭過濾器 - SILVER NANOPARTICLES 銀納米粒子?
- REVERSE OSMOSIS 反滲透 -> DEMINERALIZED WATER 脫礦水 --> LOW Ca, Mg, K, Na, Cl --> HIGH Pb, Cd
- HOT WATER TANK 熱水罐
- WATER STORAGE 水的儲存

# GENETICALLY ENGINEERING FOODS

## 基因工程食品

- TRADITIONAL SELECTIVE BREEDING 傳統選擇性育種

- GENETIC MODIFIED FOODS SINCE 1983

1983年以後的基因改造食品

\* PLANTS: CORN, SOYBEAN, COTTON, PAPAYA, SQUASH, TOMATO, POTATO, TOBACCO, RICE, PAPAYA, ZUCCHINI, APPLE 植物: 玉米, 大豆, 棉花, 木瓜, 南瓜, 番茄, 馬鈴薯, 煙草, 米, 木瓜, 義大利節瓜, 蘋果

\* DERIVATIVES: VEGETABLE OILS, SUGAR, LECITHIN ETC.

衍生物: 蔬菜油, 糖, 卵磷脂等

\* ANIMALS: SALMON, LIVESTOCKS ETC. 動物: 鮭魚, 禽畜等

# GENETICALLY ENGINEERING FOODS

## 基因工程食品

- GOVERNMENT REGULATION 政府法規: FDA 聯邦食品暨藥物管理局, USDA 美國農業部, EPA 美國國家環境保護局
- LABELING 標籤: JULY, 2016
- NOT REPRODUCIBLE 不能再生
- CONTROVERSIES FOREVER 具爭議性

# FOODS PROCESSING 食品加工

- PROCESSED FOODS: REFINED GRAINS, PRESERVED MEATS, ETC  
加工食品：精製穀物，加工肉制品等
- FROZEN FOODS 冷凍食品
- CANNED FRUITS AND VEGETABLES  
罐頭水果和蔬菜

# FOOD COOKING 食物烹飪

- MOIST HEAT METHODS: BOILING, POACHING, STEWING, STEAMING, PRESSURE COOKING, BLANCHING  
蒸汽加熱方法: 沸煮, 低溫小火水煮, 燉煮, 蒸, 壓力鍋烹飪, 燙煮
- DRY HEAT METHODS: ROASTING, GRILLING, TOASTING, BAKING, SAUTEING, FRYING  
乾熱方法: 烘烤, 燒烤, 烘烤, 烘焙, 烹炒, 煎
- OTHERS 其他:  
BRAISING 燜, MICROWAVING 微波爐, SOLAR COOKING ETC 太陽能烹飪等

Q&A

問題解答