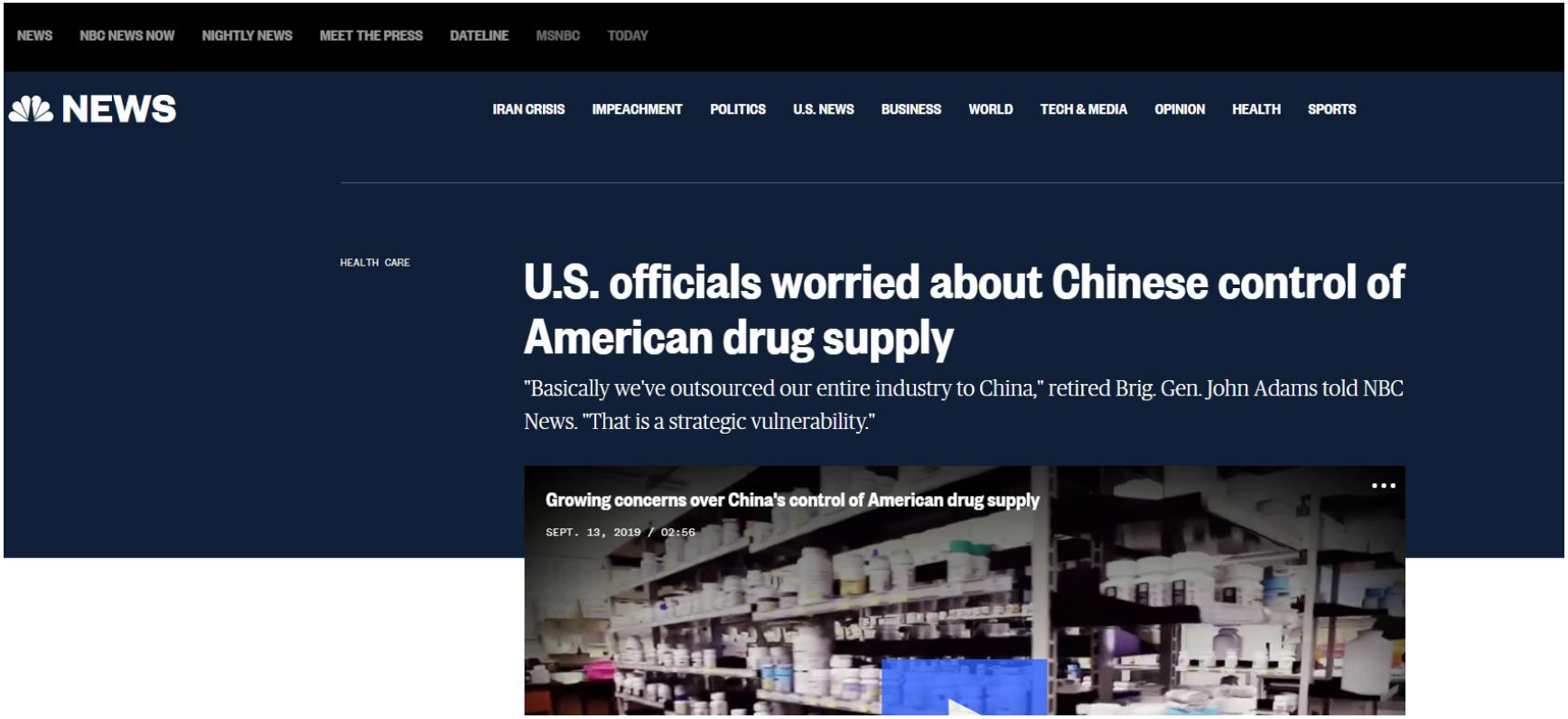
# 高飛廣播站:

# 武漢肺炎與超級病毒 (SUPER BUG)

https://cn.nytimes.com/china/20200111/china-virus-wuhan-death/

# 中國是世界抗生素生產原材料基地




https://www.nbcnews.com/health/health-care/u-s-officials-worried-about-chinese-control-american-drug-supply-n1052376
https://www.politico.com/news/2019/12/20/policymakers-worry-china-drug-exports-088126

# 大多數流感毒株始於中國

msn Outlook More bing TODAY Nightly News Meet the Press Dateline Morning Joe Hardball Ed Maddow The Last Word msnbc

Home US World Politics Business Sports Entertainment Health Tech Science Travel Local Weather

Bird Flu on NBCNEWS.com

Search NBCNews.com bing Search

Advertise

## Asia is traditional cradle of influenza

But flu can originate anywhere, experts warn

Jump to discuss comments below

Below: Discuss Related

Recommend 0 Tweet Share 37

Associated Press

updated 2/2/2004 1:15:29 PM ET

Print | Font: A A + −

BANGKOK — For much of the past century, Asia has been the cradle of influenza, including two of the three major human flu pandemics.

Experts say that given the right conditions, influenza can emerge anywhere, but they say Asia has all th afflicting 10 Asian

All flu viruses pro jump to humans i animals.

"In Asia we have a the world's people World Health Org

Don't miss thes

### Most flu strains start in China

The population of China alone is bigger than that of the whole of Africa, and 80 percent of the new human flu strains the last few decades appeared in China first. With health officers already leery about a return of SARS, experts are keeping watch on the bird flu in Asia, where the virus has killed millions of chickens, and millions more have been slaughtered in an effort to prevent its spread. Eight people have died in Vietnam and two in Thailand.

Larry Page's damaged voca with trade-offs

Report questioning salt gui

CDC: 2012 was deadliest ye

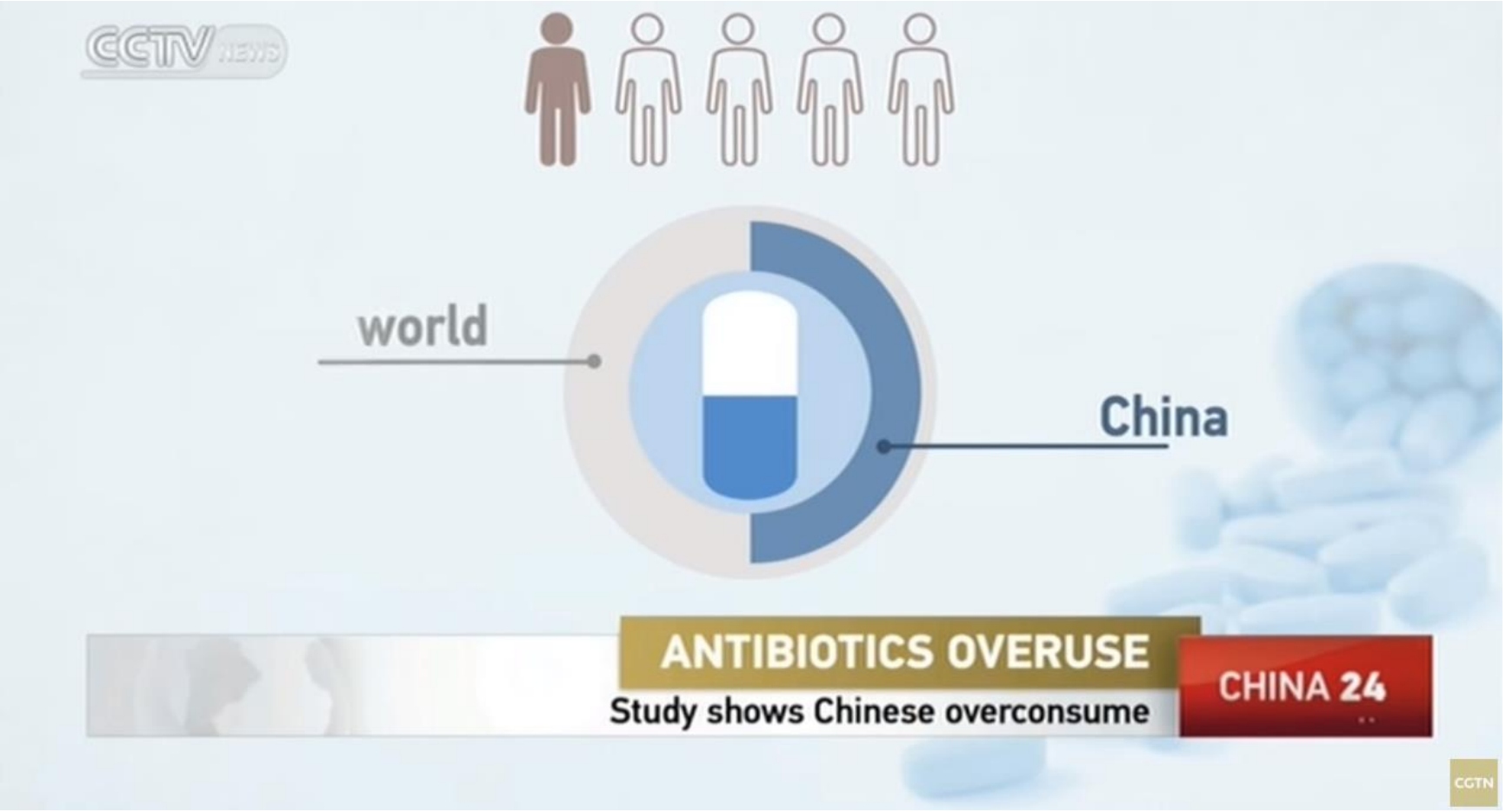
What stresses moms most

http://www.nbcnews.com/id/4135122/ns/health-infectious_diseases/t/asia-traditional-cradle-influenza/#.Xg9E_VUzZhE

# 中國正在消耗世界上一半以上的抗生素

https://www.youtube.com/watch?v=ahIZarIObbk
https://www.youtube.com/watch?v=5Xqb4YlRu90

# 中國世界人口占5分1用了一半抗生素




https://www.youtube.com/watch?v=ahIZarIObbk
https://www.youtube.com/watch?v=5Xqb4YlRu90

# 主研究人話河流好多抗生素

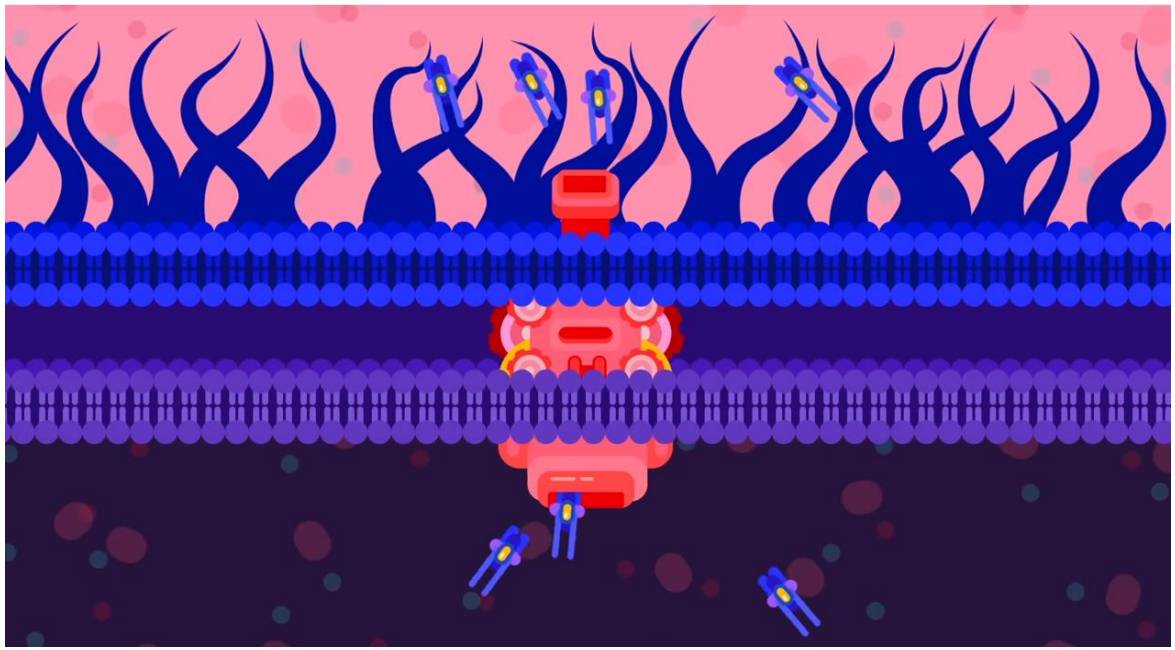
https://www.youtube.com/watch?v=ahIZarIObbk
https://www.youtube.com/watch?v=5Xqb4YlRu90

# 抗生素破壞細菌生存機製,但免疫細胞沒有紀錄

- 非自然抗菌直接殺菌用以下其中一種方法
  1. 破壞代謝
  2. 破壞菌的細胞壁
  3. 破壞DNA/RNA 複製
- 如身體免疫系統負責,免疫細胞會有記憶

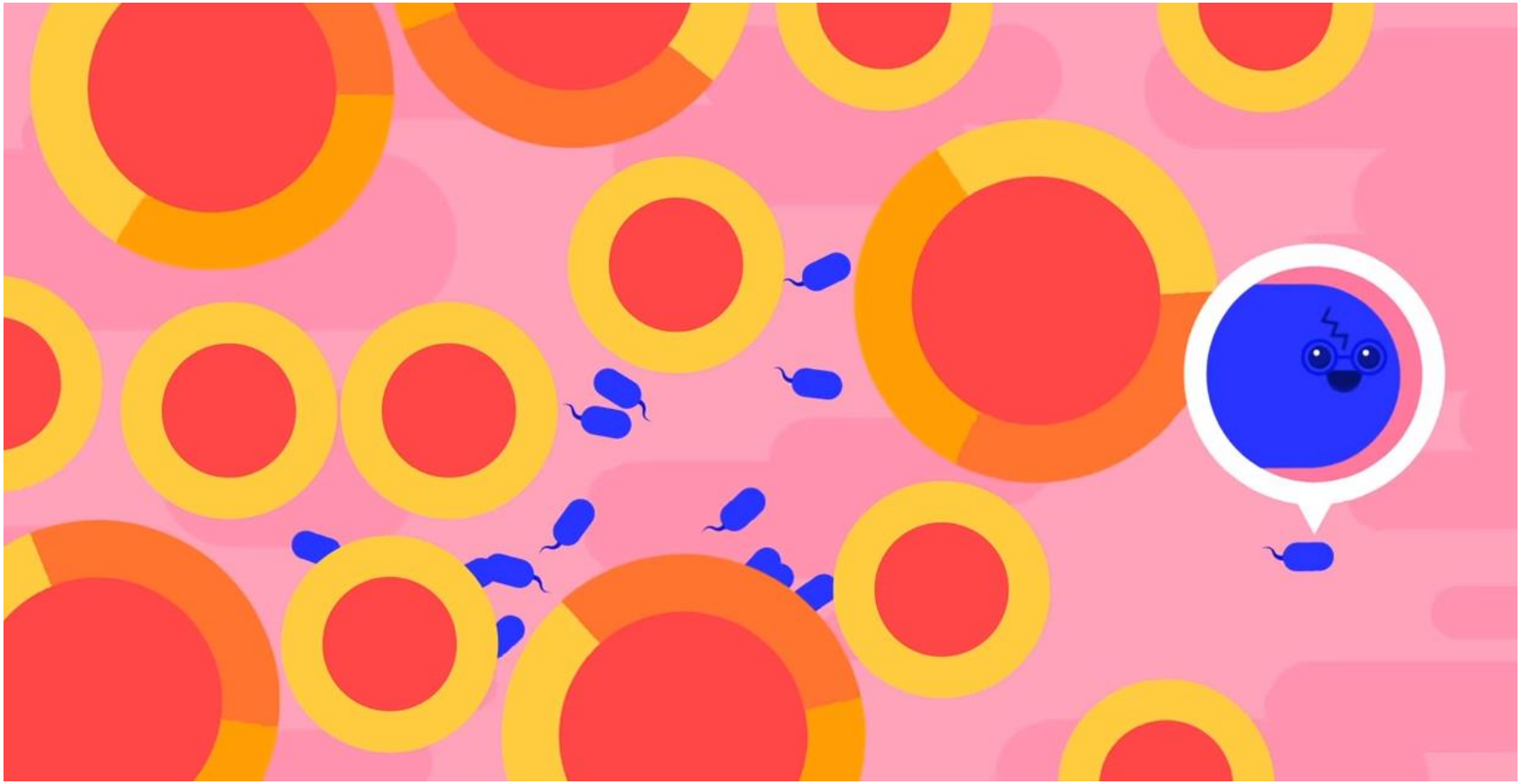
# 病菌/毒變種

- 攻擊/中和抗生素
- 排走抗生素



https://www.youtube.com/watch?v=xZbcwi7SfZE

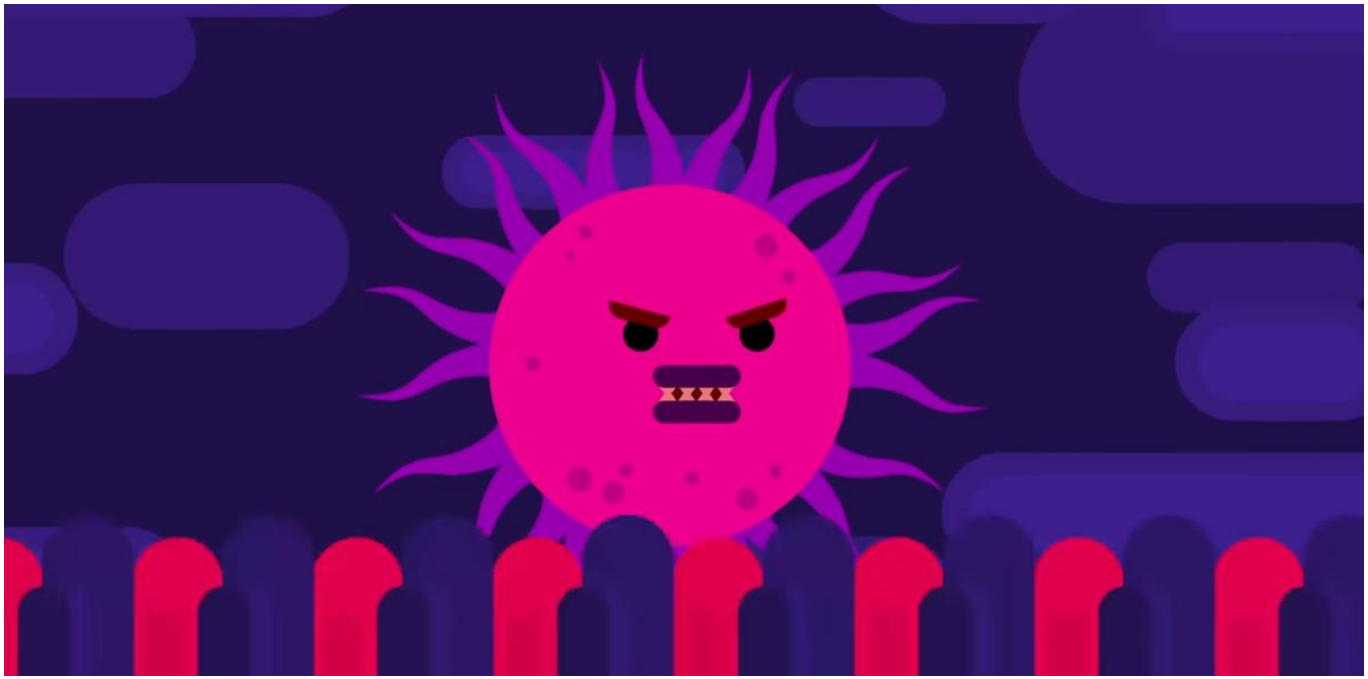
# 抗生素殺大部分,但有極少數殺不死



https://www.youtube.com/watch?v=xZbcwi7SfZE

# 逃走了的把基因傳播

- 微生物互相接觸已經可以交換基因
- 交換不一定要同一品種



https://www.youtube.com/watch?v=xZbcwi7SfZE

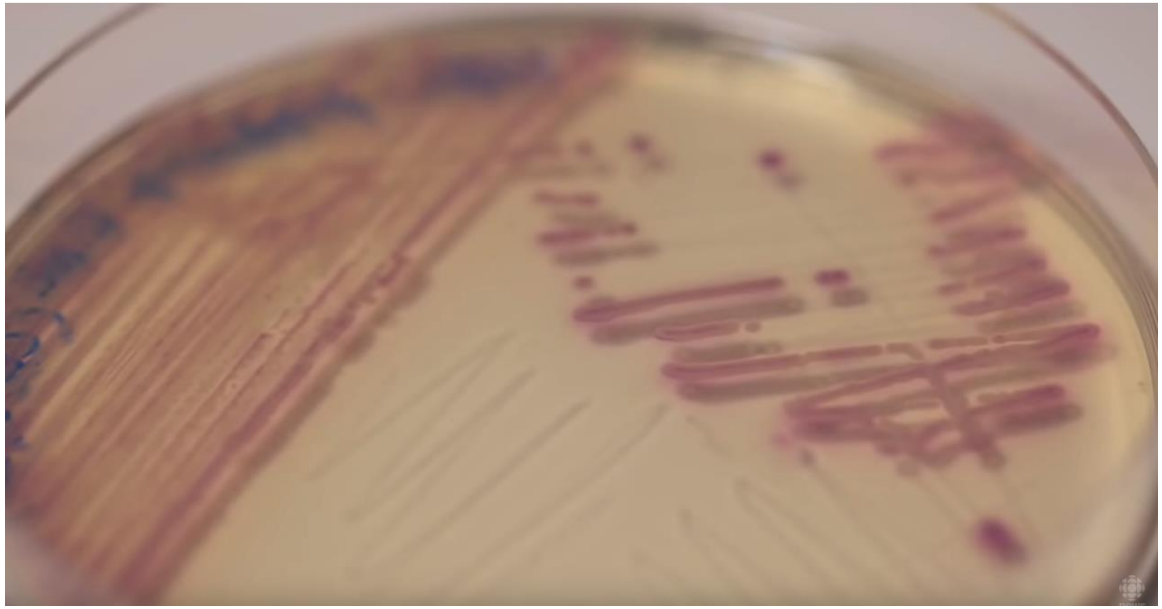
# 抗藥菌周圍都有

- 你體內都可能有
- 問題係數量多少比例, 只要好菌多就OK
- 醫院相反最多抗藥菌, 因為用抗生素多
- 肉類同水都有

# 最強抗生素只可用在抗藥惡菌
# 但中國竟然用在養豬上

# 加拿大都有抗藥菌蝦(有方機都一樣)食17%機會食到

- 英國有研究估計2050年因為抗藥菌死的人數會比癌症多!



https://www.youtube.com/watch?v=OJVrCnjL4a8

# 可以變成抗藥菌的品種

- The key monitored strains are *E. coli, Salmonella, S. aureus, Enterococcus, Campylobacter, Streptococcus, Haemophilus parasuis*, and *Pasteurella*
- 監測的關鍵菌株是大腸桿菌，沙門氏菌，金黃色葡萄球菌，腸球菌，彎曲桿菌，鏈球菌，副豬嗜血桿菌和巴斯德氏菌

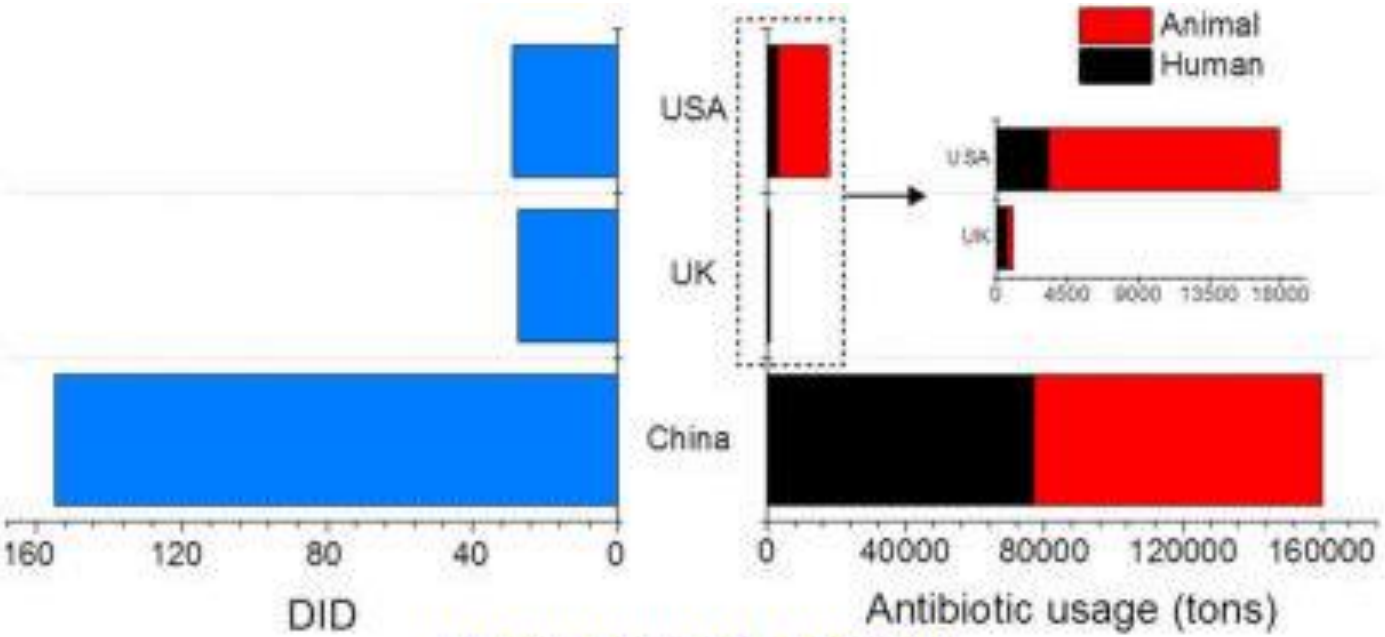
https://www.frontiersin.org/articles/10.3389/fmicb.2019.02240/full

# 大陸病人冇抗生素唔開心

- antimicrobial consumption increased by 79% [2.3–4.2 billion DDDs (defined daily doses)] in China between 2000 and 2015,
- high prevalence of chronic obstructive pulmonary disease (COPD) (8.6%, 99.9 million people)
- more susceptible to bacterial infections
- Now, ARGs are widely distributed in China in environments including clinical areas, surface water, animal wastes, sewage treatment plant effluents and soils
- smog metagenomes in Beijing contained multiple carbapenem-resistant genes.
- long-term use of steroids and immunosuppressants, the extensive development of bone marrow and organ transplantation, the increased number of invasive treatments, and the prevalence of acquired immunodeficiency syndrome (AIDS)
- 在2000年至2015年間，中國的抗菌藥物消費量增長了79％[23–42億DDD（定義為每日劑量）]，
- 慢性阻塞性肺疾病（COPD）患病率高（8.6％，9990萬人）
- 更容易受到細菌感染
- 現在，ARG在中國廣泛分佈於臨床區域，地表水，動物糞便，污水處理廠廢水和土壤等環境中
- 北京的煙霧煙霧基因組含有多個耐碳青黴烯的基因。
- 長期使用類固醇和免疫抑製劑，骨髓和器官移植的廣泛發展，侵入性治療方法的增加以及後天免疫機能喪失綜合症（AIDS）的流行

https://www.frontiersin.org/articles/10.3389/fmicb.2019.02240/full

# 大陸人畜用抗生素世界第一




View original version

https://pubs.acs.org/doi/pdfplus/10.1021/acs.est.6b06424

- If people live in harmony with bacteria, fungi or viruses, people are less likely to get sick. In recent years, fecal microbiota transplantation (FMT) and probiotics are increasingly used in the treatment of various diseases such as *Clostridium difficile* infection, inflammatory bowel disease, constipation, diabetes and obesity, etc. (Rossen et al., 2015). These methods are all based on the restoration of dysregulated intestinal flora to cure the diseases.
- 如果人們與細菌，真菌或病毒和睦相處，則人們患病的可能性就較小。 近年來，糞便微生物移植（FMT）和益生菌越來越多地用於治療各種疾病，例如艱難梭菌感染，腸炎，便秘，糖尿病和肥胖等（Rossen等人，2015）。這些方法都是基於恢復失調的腸道菌群來治癒疾病。

https://www.frontiersin.org/articles/10.3389/fmicb.2019.02240/full

# 銀離子對SARS(冠狀病毒)有效

businesswire.com/news/home/20050613005654/en/University-Study-Shows-Ionic-Silver-Effective-SARS?fbclid=IwAR20hfLdApxpzkRiPYPJD1qJVw_91XqUJczV6SXwD8JfGmzmmHy53S1hZMU

Bookmarks 從 IE 匯入 Yahoo Home - Dropbox pCloud :: File Mana... About Chita - Сайт...

Business Wire
A Berkshire Hathaway Company

HOME SERVICES NEWS EDUCATION ABOUT US

Search

Log In Sign Up

This site uses cookies. By continuing to browse this Business Wire site (and/or any other Business Wire website), you accept the use of cookies. Learn more I agree

## University Study Shows Ionic Silver Effective Against SARS; Supports Previous Research Findings on SARS Virus

BIOWIRE2K

June 13, 2005 09:56 AM Eastern Daylight Time

WAKEFIELD, Mass.--(BUSINESS WIRE)--June 13, 2005--AgION Technologies, Inc., a leading provider of engineered antimicrobial solutions, today announced that its research efforts have demonstrated that ionic silver was found to effectively deactivate the human coronavirus strain 229E, a virus linked to SARS, during a laboratory study conducted by the University of Arizona.

The study, led by C.P. Gerba, Ph.D. and K.R. Bright, Ph.D., tested various ionic silver and copper levels to determine if they were effective against the human coronavirus strain 229E, a strain commonly used as a surrogate for the SARS virus in laboratory research. The research demonstrated significant reductions of the virus within 1 hour (90 percent) and reduced virus levels to below the detection limit following 24 hours of exposure (99.99 percent).

"The fact that the ionic silver is effective against this human coronavirus strain suggests that it may also be effective in reducing the human SARS virus, which has caused widespread illness in numerous countries throughout the world. Since the

"These are very exciting results," said Dr. Gerba. "The fact that the ionic silver is effective against this human coronavirus strain suggests that it may also be effective in reducing the human SARS virus, which has caused widespread illness in numerous countries throughout the world. Since the compound is both safe and effective, there are countless potential applications."

This study supports previous findings from research on the human SARS virus

AGION TECHNOLOGIES

Contacts
AgION Technologies
Barry Green, 781-224-7100
bgreen@agion-tech.com

https://www.businesswire.com/news/home/20050613005654/en/University-Study-Shows-Ionic-Silver-Effective-SARS?fbclid=IwAR20hfLdApxpzkRiPYPJD1qJVw_91XqUJczV6SXwD8JfGmzmmHy53S1hZMU

- A 2003 study by the Chinese Center for Disease Control and Prevention found the ionic silver completely deactivated the human SARS virus after 2 hours. In addition, a laboratory study conducted by University of Arizona in 2003 found the ionic silver deactivated 99% of the feline coronavirus within 4 hour
- 中國疾病預防控制中心2003年的一項研究發現，離子銀在2小時後完全殺滅人類SARS病毒。 此外，亞利桑那大學在2003年進行的實驗室研究發現，離子銀在4小時內使99％的貓冠狀病毒死亡

https://www.businesswire.com/news/home/20050613005654/en/University-Study-Shows-Ionic-Silver-Effective-SARS?fbclid=IwAR20hfLdApxpzkRiPYPJD1qJVw_91XqUJczV6SXwD8JfGmzmmHy53S1hZMU

# 穀胱甘肽在中樞神經系統病毒性疾病中的作用

Books Publish About News Contact

Author Panel Sign in Search

*Open access peer-reviewed chapter*

## The Role of Glutathione in Viral Diseases of the Central Nervous System

By Juliana Echevarria Lima

Submitted: September 19th 2017 Reviewed: March 18th 2018 Published: November 5th 2018

DOI: 10.5772/intechopen.76579

Home > Books > Glutathione in Health and Disease

Downloaded: 396

Abstract

SHARE THIS CHAPTER

DOWNLOAD FOR FREE

# Inflammation -> ROS -> use GSH

- Inflammation cause ROS to produce in high amount
- the formation of oxygen free radicals induced tissues and cell damage [2]. At the same time, it was suggested that the mice treatment with glutathione (GSH) inhibited the animal deaths caused by X-ray irradiation
- 炎症導致ROS(自由基)大量產生
- 氧自由基的形成誘導組織和細胞損傷[2]。 同時，提示用穀胱甘肽（GSH）處理的小鼠可抑制X射線照射引起的動物死亡。

# 在脂質體中的靈芝多醣可促進Th1-免疫反應

researchgate.net/publication/290510129_Ganoderma_lucidum_polysaccharides_encapsulated_in_liposome_as_an_adjuvant_to_promote_Th1-_bias_immune_response

Bookmarks 從 IE 匯入 Yahoo Home - Dropbox pCloud :: File Mana... About Chita - Сайт...

hGate Search for publications, researchers, or questions or Discover by subject area Recruit researchers Join for free

Advertisement

See all › 20 Citations See all › 31 References Download citation Share Request full-text

## Ganoderma lucidum polysaccharides encapsulated in liposome as an adjuvant to promote Th1- bias immune response

Article in Carbohydrate Polymers 142 · January 2016 with 62 Reads
DOI: 10.1016/j.carbpol.2016.01.021
Cite this publication

Zhenguang Liu
Jie Xing
Sisi Zheng
+ 8
Ruonan Bo
26.18 · University of California, Davis
Show more authors

Abstract

Liposome-based vaccine delivery systems are known to enhance immune responses. Ganoderma lucidum polysaccharides (GLP) have been widely studied as immunomodulator and it could be as inducers of strong immune responses. In the research, GLP and ovalbumin (OVA) were encapsulated

FEATURED VIDEOS Powered by [primia]

Why a Commitment to Open Science Makes a Great Job Candidate Read More

Advertisement

freshdesk

https://www.researchgate.net/publication/290510129_Ganoderma_lucidum_polysaccharides_encapsulated_in_liposome_as_an_adjuvant_to_promote_Th1-_bias_immune_response
https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-03751-6_6-1

The presence of PS-G (Lingzhi Polysacchrides) exerted an effect on shifting the immune balance towards Th1 in children with allergic asthma

PS-G（靈芝多醣）使過敏性哮喘兒童的免疫平衡朝著Th1(真正可以有記憶的免疫反應)減低Th2低度發炎問題



BMC Immunology



Research article | Open Access | Published: 25 May 2011

# Immuno-modulatory activity of *Ganoderma lucidum*-derived polysacharide on human monocytoid dendritic cells pulsed with Der p 1 allergen

Rong-Hwa Jan, Teng-Yi Lin, Ya-Chun Hsu, Shiuh-Sheng Lee, Shih-Yen Lo, Mingi Chang, Li-Kuang Chen & Yu-Li Lin

*BMC Immunology* 12, Article number: 31 (2011) | Cite this article

10k Accesses | 15 Citations | 12 Altmetric | Metrics



Abstract
Background
Results
Discussion
Conclusion
Methods

## Abstract

**Background**

*Ganoderma lucidum*-derived polysaccharide (PS-G) can rapidly and effectively

https://bmcimmunol.biomedcentral.com/articles/10.1186/1471-2172-12-31

# TH1/TH2 immunostasis

- TH1 – 永久免疫 / 會發炎 / 通常發揮在身體接觸外來細菌時(如鼻咽，腸胃，皮膚)
- TH2 – 在朋體液內發生 / 短暫免疫 / 不一定發炎 / 長期低度炎症(敏感)

- 疫苗是過度刺激TH2，會引致TH1下降，使身體更易受感染
- TH2過度受刺激引起的病包括: 狼瘡、 過敏性皮炎、 硬皮病、 特應、濕疹、 鼻竇炎、 炎症性腸病、 哮喘、 過敏、 癌症、 潰瘍性結腸炎、 多種化學敏感
- 平衡TH1/TH2是用相反的物質作適當的調整

https://steemit.com/vaccines/@canadian-coconut/vaccinations-create-the-wrong-type-of-immune-response-th2-vs-th1-cells-and-achieving-immunostasis
http://hypothyroidmom.com/autoimmune-patients-have-you-heard-of-th1-and-th2-dominance/

# 免疫記憶

- TH1保護人體免除一般天然病毒細菌從體外(皮膚、呼吸、腸胃)攻擊，一經感染會發病，然後把全面地殺病毒或病菌從而保持它們在體外，終身免疫。
- TH2使人體在體液內受攻擊，產生短暫緊急反應，用大量抗體保護身體細胞，但因為病毒未必可以完全殺死，身體就把感染體內化(Internalize)，減低受人為感染的病症，但因為免疫記憶比較差，會再次受同一樣的感染

http://pathwaystofamilywellness.org/Informed-Choice/how-do-vaccines-work-immune-mechanisms-and-consequences.html

# 抗體?

- It is commonly held that the presence of antibody to viruses is a sign of a chronic on-going infection not a sign of immunity

- 通常認為抗體的存在是慢性持續感染的徵兆，而不是免疫的跡象


1. Golding S., Scott DE., Vaccine Strategy: Targeting Helper T Cell Responses. Ann. NY Acad. Sci. 754:126-137, May 31, 1995
2. Moskowitz R., How Do Vaccines Work? Pathways, Is. 10: 5-9, 2006
3. Taylor,J. Which Arm of the Immune Response most Likely Plays the Predominant Role in Host Defense Against Influenza Virus: humoral or cell-mediated? Medscape Feature, 1998, 08.98, p.443

# TH2過度刺激

- 容易慢性耳，呼吸道和胃腸道感染
- 嚴重疾病: 過敏，哮喘，特應性皮炎，系統性紅斑狼瘡，癌症，結核病和愛滋病
- TH2過高會釋放化學物質影響神經系統及心情

Hurwitz E., Morgenstern H. Effects of Diphtheria-Tetanus-Pertussis or Tetanus Vaccination on Allergies andAllergy Related Respiratory Symptoms Among Childern and Adolescents in the U.S.  JMPT Vol. 23#2 Feb. 2000

Watkins A. Mind Body Medicine  - A Clinicians Guide to  Psychoneuroimmunology. Churchill Livingstone, 1997.

# 平衡TH1/TH2

## TH1

- 黃芪
- 松果
- 藥用蘑菇（Maitake和β-葡聚醣是常見的）
- 甘草（在甘草中發現）
- Melissa Oficinalis（檸檬香膏）
- 人參
- 小球藻
- 葡萄籽提取物

## TH2

- 咖啡因
- 綠茶提取物
- 松樹皮提取物
- 白柳樹皮
- 番茄紅素（發現於西紅柿和其他紅色水果，不含草莓和櫻桃）
- 白藜蘆醇（發現於葡萄皮，發芽花生和可可）
- 碧蘿芷（在法國海鬆鬆皮和蘋果提取物中發現）
- 薑黃素（發現於薑黃）
- 染料木苷（發現於大豆）
- 槲皮素（在許多水果和蔬菜中發現的黃酮，如洋蔥，漿果和羽衣甘藍）

http://hypothyroidmom.com/autoimmune-patients-have-you-heard-of-th1-and-th2-dominance/

# 調節TH1/TH2平衡

- Prebiotic / Probiotic (發酵菜)
- Vitamin A
- Vitamin E (紅棕櫚油Red Palm Oil，蛋黃，牛油果，以及堅果和種子）
- 初乳(山羊 )colostrum (goat)
- Vitamin D
- EPA DHA (fish oil), 素食者可以食omega 3加α-亞麻酸

http://hypothyroidmom.com/autoimmune-patients-have-you-heard-of-th1-and-th2-dominance/

# 用益菌阻止超級細菌

Microbiome Special Research Program

All microbes, All the time

ABOUT › PEOPLE › NEWS › EVENTS › FUNDING › RESOURCES › CONTACT

## Stopping Superbugs With Friendly Microbes

Home > Stopping Superbugs With Friendly Microbes

https://microbiome.ucdavis.edu/zh-hans/node/1666