1. 有机食品是健康的选择吗?

*Organic有机的 food* options（n.）选择 are often *a pretty penny*许多钱 more than their conventionally传统的 produced counterparts配对物. And they have often been touted兜售 as better for you [as well as *the environment*].

But [if you're looking for extra nutrients营养物] you might not be getting them, according to *a new review报刊的评论 paper* （in *Annals*年鉴 of *Internal Medicine*内科医学）.

Researchers analyzed分析 results [from 237 strong studies] 目的状looking for health differences between the two types of food——and didn't find much. Only 17 of the studies were in humans, and they did not include any *long-term follow-ups* of their subjects.

One study did find that *children* （on an organic diet） had *smaller traces* of pesticides杀虫剂 in their bodies. And although *pesticide amounts* were below *current acceptable U.S. levels*, *many health experts* contest对…提出异议 that *pesticide exposure（n.）暴露 limits* are still too high.

Organic methods might also cut down on减少 antibiotic抗生素-resistant bacteria细菌.

So going organic might be more *a personal choice* about supporting *that form* of farming than about *specific特定的 health benefits*. And *the most important health choice*, it seems, is to stop dallying over produce labels标签/ and just eat it—at least five servings一份食物的量 a day.

有机食物通常会比传统食物贵很多，而且它们通常被吹捧成既对身体好又对环境有益的事物。然而，根据《内科医学年鉴》上一篇新的回顾性论文所说，如果你正在寻找额外的营养，你可能不会从有机食物上获得它们。

研究者分析了从237项令人信服的研究中所得出的结论，这项研究旨在寻找有机食物和传统食物的区别。结果他们并没有发现这两类食物有什么区别。

只有17项研究以人类作为实验对象，这些实验中没有任何长期被随访的受试者。

的确有一项研究发现，那些吃有机食物的儿童，其体内存有微量杀虫剂。尽管杀虫剂含量低于目前美国可接受的最低标准，但是仍有许多健康专家对其提出质疑，他们表示杀虫剂在体内暴露的最低值还是被有关部门定得太高了。

有机食物还可能杀死耐抗生素的细菌。

于是，选择有机食物可能更多是一种支持种植方式的个人选择，而并非出于具体的健康优势。 最重要的健康选择似乎是，别把时间浪费在看产品标签上有没有写着“有机”两字，就去吃它吧——每天至少来上五份！

1. Organic [ɔ:ˈgæ-nɪk] adj.有机的；绿色的；无农害的；不使用化肥的
2. a pretty penny许多钱，相当多的钱
3. penny n. 便士
4. counter-part [ˈkauntə-pa:t] n.职能(或地位)相当的人;对应的事物

The Foreign Secretary telephoned *his Italian counterpart* to protest. 外交部长致电意大利外长表示抗议。

1. tout [taut] v.兜售;吹嘘
2. nutrient [ˈnju:-tri-ənt] n.营养物质;养分;滋养物
3. Annals [ˈænlz] n.史册;历史记载。（用于学术杂志的名称）年鉴
4. Internal Medicine n. 内科医学
5. Internal adj. 国内的；内部的；体内的；内心的
6. strong adj. (印象、影响)强烈的，深刻的
7. pesticide [ˈpestɪ-saɪd] n. 杀虫剂，农药
8. contest v.争辩;对…提出异议。竞争，为…而奋争；辩驳
9. cut down on减少,削减;节省

He cut down on coffee and cigarettes, and ate a balanced diet. 他喝咖啡和吸烟都比以前少了，饮食也均衡了。

1. anti-bi-otic[ˌænti-baɪ-ˈɔtɪk] n. 抗生素；抗菌素
2. bacteria [bæk-ˈtɪə-riə] n. 细菌(bacterium的名词复数)
3. specific [spəˈsɪ-fɪk] adj.① (部位、问题、题目等)特定的，特别的。②（表达）明确的，确切的，具体的

There are several specific problems to be dealt with... 有几个特定问题需要解决。

I asked him to be more specific... 我要求他说得更具体些。

1. dally [ˈdæli] vi. ①慢吞吞地做;拖延。②随随便便地对待；不很认真地考虑；浪费时间；调情。

He did not dally over *the choice* of a partner. 他没有在选择合伙人的问题上浪费时间。

[In the past] he dallied with actresses and lady novelists. 他过去曾与许多女演员和女小说家调情。

1. dally over v. 延误

Don't dally over your work. 别磨洋工了.

1. serving n. (供一个人吃的)一份食物的量
2. 掌声也会传染

Applause鼓掌声 is a sign迹象 of appreciation after a good performance. Right? Actually, a new study finds that {how enthusiastically非常感兴趣地 you clap拍手} can be strongly influenced by the volume and frequency of the audience clapping around you.

To test howapplauding鼓掌 behavior spreads使散布 in groups, researchers filmed拍摄 six different sets of university students who were told to clap after listening to an academic lecture演讲.

The videos showed that people were strongly swayed受影响 by other audience members, or even by just one particularly influential有影响力的 clapper鼓掌者. *Applause掌声 incidents事件* averaged平均值为 9-15 claps（n.） per person, but would swell to膨胀到 as many as 30 claps solely仅仅 based on an individual applause（n.）鼓掌 leader. The spasm（n.）发作 stopped in much the same way: when one person ceased clapping it triggered触发 a larger group dynamic动态.

The study is in the Journal of the Royal Society Interface接口 and is part of *a larger effort* to understand social behavior and how it can spread使传播 within a group.

So the next time you see a dull沉闷的 performance, remember, the desire to hold back抑制住 on clapping might be out of your hands.

掌声是对一场精彩表演的赞美。对吗？实际上，一项研究证明，你鼓掌的热情程度会深受你周围观众掌声的数量和频率的影响。

为了验证鼓掌行为是如何在人群中传递的，研究人员拍摄了不同组的大学生，并要求他们在听完学术讲座后鼓掌。

视频显示，人们总是深受其他成员的影响，有时甚至只受到某一特殊鼓掌者的影响。在鼓掌过程中，平均每人鼓掌9至15次，但如果有个人领先鼓掌，那么平均每人鼓掌的次数将增加到30次。掌声停下来的方式也类似：当这个人不再鼓掌时，那么便会触动一大群观众的停止拍手。

这项研究发表在《皇家学会界面杂志》上，是了解社会行为及其如何在群体传播的另一项努力的一部分。

因此下次你看了一场枯燥的表演时，记住你是无法左右自己不愿鼓掌的欲望的。

1. Applause [əˈplɔ:z] n.掌声;喝彩
2. enthusiastically [ɪnˌθju:-zɪ'æs-tɪklɪ] adj.非常感兴趣的;热心的;热情的

Bob Dole seemed less than enthusiastic（adj.） about the proposed move. 鲍勃·多尔似乎对提议的这项行动不太感兴趣。

The announcement通告 was greeted enthusiastically. 公告受到人们的热烈欢迎。

1. clap v. n.拍手，鼓掌

→（v.）you clap someone on the back or on the shoulder, 轻拍(背或肩膀)

1. applaud [əˈplɔ:d] v.鼓掌（以示赞赏）
2. spread [spred] v.①摊开;铺开。②(使)传播;(使)散布;(使)扩散。③伸出，张开,叉开(手臂、双手、手指、双腿等)

His coat was spread over the bed. 他的外套摊在床上。

...the sense of fear spreading in residential neighborhoods... 在住宅小区中蔓延的恐惧感

Sitting on the floor, spread your legs as far as they will go without overstretching... 坐在地板上，在不要拉伤的前提下将双腿尽量分开。

1. you are swayed by someone or something, v.影响;左右
2. influential [ˌɪn-fluˈenʃl] adj.有影响力的;有权势的
3. swell [swel] v. ①(使)膨胀;(使)扩大;(使)增加。②(身体部位)肿胀，膨胀。③涌起，充满(某种情感) 。④(声音)增强,变响亮

[By the end of this month] the size of the mission is expected to swell to 280 people... 到这个月底，参加该任务的人员规模将有望增至 280 人。

The limbs swell to an enormous size. 四肢肿得不得了。

She could see her two sons swell with pride. 她能看出她的两个儿子充满了骄傲。

Heavenly music swelled from nowhere. 不知从何处响起天籁般的音乐。

1. spasm [ˈspæ-zəm] n.①痉挛;抽搐。②(剧痛或不愉快情感的)阵发，迸发。（能量、行为等的）突发；发作

*A muscular spasm* in the coronary artery can cause a heart attack... 冠状动脉的肌肉痉挛可能导致心脏病。

A spasm of pain brought his thoughts back to the present... 一阵剧痛把他的思绪拉回到了现在。

1. trigger [ˈtrɪgə(r)] n. （枪）扳机。v.引爆;启动;触发
2. you hold back or if something holds you back, （使）犹豫;（使）退缩

The administration had several reasons for holding back... 政府因为几个原因而犹豫不决。

→To hold someone or something back 阻挡;阻止

Jake wanted to wake up, but sleep held him back. 杰克想要醒来，但睡意使他又沉入梦乡。

→you hold something back, ①储备;保留。②隐瞒

Farmers apparently hold back produce in the hope that prices will rise. 农民囤积农产品，显然是希望价格能够上涨。

You seem to be 表holding something back. 你好像隐瞒了点什么。

→you hold back something such as tears or laughter, or if you hold back, 抑制住,忍住(眼泪、笑声等)

1. 同情心可以通过训练来养成

Can you train训练 someone to be a nicer person? A recent study using meditation冥想 techniques shows that it might be possible. The research is published in the journal Psychological Science.

One group of subjects learned to practice what's called “compassionate有同情心的 meditation冥想” by focusing on a specific person while repeating a phrase短语 like, “May祝愿 you be free from suffering.” The subjects concentrated on集中心思于 five different people: A loved one, a friend, themselves, a stranger and then someone they were in conflict冲突 with. Another group of subjects performed执行做 general positive积极的 thinking. Both groups did the exercise 30 minutes a day for two weeks.

Then everyone was asked to spend money to help a fictional虚构的 character人物 who had been treated unfairly.

And the subjects who did compassionate有同情心的 meditation冥想 were more likely to spend their money to help than those who trained to just think more positively积极地. The researchers also did brain scans of those who behaved表现 most altruistically利他地, before and after training. And people （who were most altruistic利他的 after training） showed the biggest increases in activity活动 in brain areas involved in与…有密切关联的 empathy同理心 and positive emotion. So empathy同情 appears to be like a muscle—it can be built up by exercise that causes引起 actual physiological changes.

你能把某人训练成为一位更优秀的人吗？一项近期的、结合冥想技巧的研究显示，那是可能的。该研究发表在《心理科学》杂志上。

一组受试者学着去实践所谓的“慈悲冥想”，即将注意力集中在一个特定的人身上，并不停地重复一句话，例如“祝愿您远离痛苦”。这些受试者们将注意力集中在5个人身上：爱人，朋友，自己，陌生人，然后是与之有冲突的人。另一组受试者则进行一般积极的思考训练。每组受试者每天这样锻炼30分钟，持续两个星期。

之后便要求每位受试者花钱去帮助一位虚构的、被不平等对待的人。

相比那些在训练时想法更积极的人来说，那些进行同情冥想的人，更愿意花钱去帮助别人。在训练前后，研究人员分别扫描了那些表现得最无私的受试者的大脑。结果显示，那些在训练后表现最为慷慨的受试者，其大脑内与同情和积极的情绪有关的区域的活动大为增强（本博：自我实现的预言？）。因此，同情心似乎与肌肉类似——可以通过能引起真正生理变化的训练来建立。

1. medit-ation [ˌmedɪ-ˈteɪʃn] n.①（宗教中）默想，打坐，冥想。②深思熟虑;苦思冥想

→*A meditation* on a particular subject （关于某主题的）感想,沉思录

1. compassionate [kəm-ˈpæʃə-nət] adj.有同情心的;表示同情的
2. concentrate [ˈkɒn-sn-treɪt] v. 专心于；注意；集中；聚集

→you concentrate on something, or concentrate your mind on it, 全神贯注;集中（心思）

→something is concentrated in an area, 使集中;使汇集

Most development has been concentrated in and around cities. 土地开发主要集中在城市及周边地区。

1. altruistic [ˌæl-trʊ-'ɪs-tɪk] adj.利他的；无私的
2. empathy [ˈempəθi] n.同感;同情;共鸣
3. 更年期导致记忆力减退

Women have plenty to deal with during menopause更年期. There are mood情绪 fluctuations波动 and hot flashes潮红. And now a study adds documented 形成文件的 memory loss.

In previous studies, women reported that they had memory lapses闪失 during menopause更年期. The new study wanted to see if there was an objectively在客观上 arrived-at获得 connection.

Researchers tested 68 women between ages 44 and 62 years on their attention and recall记忆力. All the women had reported having at least 35 hot flashes per week. One test involved looking at *a line drawing*线条画 for 10 seconds and then trying to reproduce重现 the figure图形 immediately afterward过后. The complexity复杂性 of the drawing increased over 10 trials试验. [In another test] researchers read out *a string of一串 numbers* and the subjects had to repeat the numbers back（adv.）回忆.

Women （who'd reported trouble remembering） indeed（adv.）的确 performed poorly on *tests* involving memory. And those （who had more, and more extreme极端的, hot flashes） did worse on the tests than those who had fewer and less intense强烈的 hot flashes. The study is published in the journal Menopause绝经期.

The study shows that memory issues are indeed associated with menopause绝经期. Although in the midst of和…一起 a hot flash, that assurance（n.）确信 might be *cold comfort*不起作用的安慰.

更年期的女人有很多问题要应付，包括情绪波动和热潮红。如今，有一项研究证明更年期还会导致记忆力衰退。

在之前的研究中，女性报告说她们在更年期期间出现记忆衰退。这项新研究想要探究这两者之间是否在客观上存在联系。

研究人员对68名年龄介于44至62岁间的女性进行了注意力和记忆力的测试。据报告，所有女性每周至少会发生35次热潮红。其中一种测试包括观看线条画10秒钟，然后立即让她们试着重新画一遍。十次实验之后，提高线条画的复杂程度。在另一项测试中，研究人员读出一组随机数字，然后让受试者重复一遍听到的数字。

实际上，那些报告说记忆困难的女性在测试（包含记忆力测试）中表现很差。并且那些出现潮热次数更多，更严重的女性，在测试中比那些出现潮热次数少且不那么严重的女性表现要差得多。这项研究发表在《更年期》杂志上。

这项研究证明，记忆问题确实与更年期有关系。尽管它们之间仿佛都与热潮现象相关联，但这种结论真起不到神马安慰作用啊。

1. meno-pause [ˈmenə-pɔ:z] n.更年期，绝经期(通常在50岁左右)

更年期综合症最普遍同时也最为突出的一个症状表现就是月经紊乱。一般而言，妇女在35岁左右就出现卵巢功能衰退、体内雌激素降低的现象，开始步入更年期，妇女更年期的情绪症状，可以维持到60岁甚至更后。

32岁以后男性荷尔蒙的水平每十年下降大约百分之十。男性更年期是和较低的男性荷尔蒙水平有关。

1. fluctuation [ˌflʌk-tʃʊ-'eɪʃn] v.变动;波动;上下浮动
2. hot flash ：潮热，又名潮红，常见于更年期或者更年前期，常伴出汗及心悸而出现的燥热症状，多数情况下，由面部或者胸部开始，蔓延至全身，有人发作时可见到面部明显潮红。每次发作可持续20～30分钟，发作次数不定，可一周出现几次，也可一天出现几次。
3. lapse[læps] n.①闪失；过失；失检。②（一时的）疏忽，大意，开小差
4. arrive at ①到达, 来到。②达成, 获得, 作出(决定)

I have not arrived at an opinion on that matter. 我对那件事还没有明确的意见。

1. you think back to something that happened in the past, adv.回想；回忆

I thought back to the time in 1975 when my son was desperately ill... 我回想起1975年我儿子病得奄奄一息的那段时间。

1. assurance[əˈʃʊə-rəns] n. ①保证；确保（you give someone an assurance that something is true or will happen）。②（人寿）保险

→（n.）you do something with assurance, 信心；把握

1. cold comfort n.不起作用的安慰

These figures may look good on paper / but are 表cold comfort to the islanders themselves. 这些数字理论上看来可能不错，不过对岛民们起不到安慰的作用。

1. 文化会影响第二外语的应用

Ordinarily通常, you'd call称呼 a pistachio开心果 a pistachio. But if you're, for example, an immigrant移民 from China / and you've just seen a Ming vase花瓶, you might call a pistachio a “happy nut坚果.” Because visual cues暗示 can affect language in people with multiple cultural experiences经验. That's according to a study in the Proceedings进程 of the National Academy of Sciences.

Researchers performed执行 various tests with students who had come to the U.S. from China. In one, the students heard a recorded录音 conversation, in English, about campus大学校园 life. But some looked at a Chinese face while they listened, while others saw a Caucasian白人的 face.

The students then spoke about their own lives. And the Chinese-American students （who had listened while looking at a Chinese face） spoke English more slowly and less fluently流利地 than those who listened while looking at the Caucasian face.

In another test, when the students were exposed to Chinese icons图符, they were more likely to translate from Chinese into English literally（adv.）照字面理解. Thus pistachios开心果 became “happy nuts,” which is the name in China.

This phenomenon现象 demonstrates表明 that *immigrants* struggling with a new language can face unusual and unanticipated意料之外的 challenges. And that what you see can affect what you say.

通常，你把 pistachio 称作 pistachio。但如果你是来自外国，比如说中国的移民，假使你刚看到一只明代的花瓶，那么你就可能会把 pistachio 称为“happy nut”。因为视觉提示可以影响有多重文化背景的人的语言。这是根据发表在《美国科学院院报》上的新研究所得出的结论。

研究人员对许多华裔美国留学生进行了各种测试。其中一种测试就是让学生听一段英语的谈话录音，主题是关于校园生活。在听的同时，有些学生看到的是中国人的面孔，而其他人则看到的是白种人的面孔。

然后让学生们讲述自己的生活。边听边看着中国人脸孔的华裔美国学生说话的语速，比那些边听边看着白种人面孔的学生慢得多。

在另外的测试中，当学生接触到中国元素时，他们会更有可能按字面意思把中文翻译成英文。因此 pistachios 就变成了“happy nuts”，就是中文“开心果”的直译。

这种现象说明，在新的语言环境下抗争的移民，要面临不寻常和不可预测的挑战。那就是：你所看到的会影响你所说的。

1. pistachio [pɪ-ˈstæ-ʃiəʊ] n. 开心果
2. im-migrant [ˈɪ-mɪ-grənt] n. (外来)移民;侨民
3. nut n.坚果
4. campus [ˈkæmpəs] n. (大专院校的)校园
5. Caucasian [kɔ:ˈkeɪ-ziən] adj.①白种人的;白人的。②高加索人的
6. fluently ['flu:-əntlɪ] adv.流利地;流畅地
7. demon-strate [ˈde-mən-streɪt] v.①证明;论证;表明;说明。②显示;表露

You have to demonstrate that you are reliable... 你得证明自己是靠得住的。

The government's going to great lengths to demonstrate its military might. 该政府正不遗余力地展示其军事力量。

1. 口头的鼓励可能会削弱运动能力

Exercising with a partner is a good motivator促进因素. But maybe only if your gym buddy同伴 keeps quiet. That's according to research to be published in the Journal of Medical Internet Research.

For the study, participants had to hold a plank厚木板 for as long as possible. Some simply did the exercise. Others did it with a partner who was on video. They were told the partner was stronger than they were—past research has shown that *a more accomplished熟练的 workout体育锻炼 buddy* motivates激励 people to exercise longer.

The video partner was silent with some participants. But the partner verbally口头地 encouraged others. And when their gym buddy told the exercisers做运动的人 to feel the burn, they instead反而 burned out筋疲力尽.

The researchers believe that the encouragement decreased减少 *exercise ability* because the participant might have interpreted解释为 the support as patronizing（adj.）自视高人一等的. Or they thought that the gym buddy was really only encouraging him- or herself.

The research could inform告知 the design （of effective有效的 *video game workouts（n.）锻炼* and *social media tools*） to help people exercise. Because while尽管 increased增加的 motivation动力 can help physical activity, a lot of yapping说个不停 may just be sapping削弱.

和同伴一起锻炼不失为一种好的办法。但前提是你的锻炼伙伴能保持安静。这是根据一项将要发表在《医学网络研究》杂志上的文章得出的结论。

为了研究，参与调查的人不得不尽可能长时间的握住一块木板。其中一些人就只是简单做这项运动。另外一些人在做运动的时候还伴随着视频，里面也有个人在同时健身。看视频的参与者被告知视频中的人经过锻炼变得很强壮了——因为过去的研究显示，如果有个成功塑身的同伴陪伴健身，能激励人坚持锻炼的时间长一些。

视频中的同伴是安静的。但同伴会在口头上进行鼓励。当这些健身伙伴对锻炼的人表示他们感到自己能量在燃烧时，受试者反而感觉不到自己在消耗能量。

研究人员们认为，鼓励会降低运动能力，因为参与调查的人本来就认为视频辅助这项内容只是一种督促。或者他们认为，健身伙伴真的就只是在鼓励他或她呢。

该研究能提示我们，设计出有效的视频运动游戏以及社会媒体工具，能帮助人们更有效的健身。因为，尽管激励作用的增加能帮助身体活动，但叽里呱啦的乱叫或许刚好抵消这种促进作用。

1. motivator ['məʊtɪ-veɪ-tə(r)] n. 激起行为（或行动）的人（或事物），促进因素，激发因素
2. buddy [ˈbʌdi] n.同伴（通常指男子的男性伙伴），搭档。老兄；老弟

→one person is buddy buddy with another, 跟…关系要好

1. accomplished adj.熟练的;才华高的;有造诣的
2. workout n.体育锻炼;体育训练
3. motivate [ˈməʊtɪ-veɪt] v. ①(尤指情绪)激发，激励，驱使。②使决心做;使决意做
4. verbally [ˈvɜ:bəli] adv. 言词上；口头地；作为动词

verbal adj.口头的;非书面的;非行动的

We have *a verbal agreement* with her... 我们和她有个口头约定。

1. burn out v.

→a fire burns itself out, 燃尽；烧尽；熄灭

→you burn yourself out, 耗尽体力；筋疲力尽

1. patro-nizing [ˈpætrə-naɪ-zɪŋ] adj.自视高人一等的；屈尊俯就的；自命为恩人的；要人领情的；傲慢的
2. motivation [ˌməʊtɪ-'veɪʃn] n. 动机；动力；诱因
3. yap [jæp] v. n.①（小狗）狂吠，汪汪乱叫。②哇啦哇啦地说个不停;瞎扯
4. sap v.消耗(精力);削弱(信心)

I was afraid the sickness had sapped my strength... 我担心患病已让我元气大伤。

sapping v. 逐渐削弱（某人[某事物]的力量、活力等）

1. 探测出声音的出现更重要

We know we can't hear everything in a busy area, or even in a quieter space. It's ultimately最终 our attention that guides what sounds reach our conscious（adj.）有意识的 awareness（n.）察觉. Think of the kids who can't hear the nagging唠叨的 parent.

But a new study finds another factor that determines…的决定因素 if we can hear a sound: Whether that sound is appearing出现 or vanishing消失.

Scientists asked participants to detect the onset（n.）开始 or disappearance消失 of different pure-tone纯音 sounds within soundscapes音响范围 of ranging在一定幅度内变化 complexity（n.）复杂性. They found that listeners are really great优秀的 at detecting new sounds but far less able to detect when a sound disappears. In fact they missed at least half of the changes when it involved a disappearing sound. This distinction特点 remained within *a range of*一系列 soundscapes, from very simple to pretty complex（adj.）.

Researchers call this phenomenon "disappearance blindness失明." Interestingly（adv.）有趣的是, vision studies研究 have found a similar advantage优势 for *objects （that appear）*, as opposed to而不是 *disappearing objects*.

This study finds that ultimately最终 the auditory（adj.）听觉的 system is not a “change” detector探测器 but rather a novelty（n.）新奇的事物 detector. The researchers note that maybe detecting the appearance出现 of new sounds, like a predator捕食性动物 approaching / or stranger in the night, is more important for survival幸存 than detecting when that sound has gone away.

我们更倾向于发现并准确定位声音的出现而不是声音的消失。

我们知道在嘈杂的环境里听不到所有声音，甚至在比较安静的地方也如此。最终决定声音进入我们的认知系统的是我们的注意力。想想那些听不见父母唠叨的小孩吧。

但是最新研究发现另一个因素也会决定我们能否听到声音：声音是正在出现还是消失。

科学家让研究参与者探查声音的出现与消失，这些声音为声谱中的单音调，并依次变复杂。他们发现，参与者很擅长探测出新声音的出现，却不太能探测到声音的消失。事实上在声音消失的变化中，他们至少错过了一半。从简单到复杂的声谱中，都存在这种差别。

研究人员称这种现象为“消失忽略”。有趣的是，视觉研究也发现了相同的现象，相比物体的消失，人们更容易察觉到物体的出现。

这个研究发现，最终听觉系统不是“变化”探测器，而是猎新探测器。研究者指出，也许探测出新出现的声音（如捕食者的靠近，或深夜陌生人的声响）比探测消失的声音对生存更有利。

1. ultimately [ˈʌltɪ-mətli] adv.①最终；最后；终于。②根本上；归根结底

Ultimately, *Bismarck's revisionism* scarcely几乎不 affected or damaged British interests at all. 从根本上说，俾斯麦的修正主义，几乎未对英国的利益造成一丝一毫的影响或损害。

1. conscious [ˈkɒnʃəs] adj. ①清醒的;有知觉的。②(记忆或想法)有意识的，意识到的

She was fully conscious all the time and knew what was going on. 她一直都很清醒，知道是怎么回事。

He had no *conscious memory* of his four-week stay in hospital... 他对自己住院的4个星期没有任何有意识的记忆。

→you are conscious（adj.） of something, ①注意到的;意识到的。②(尤指由于不满或自觉重要而)注意的，关注的

She was very conscious {of Max studying her}... 她非常清楚马克斯在仔细端详她。

I'm very conscious of my weight... 我很在意自己的体重。

1. aware-ness [əˈweə-nəs] n. 察觉，觉悟，意识

The 1980s brought *an awareness* of green issues... 20世纪80年代人们开始意识到“绿色问题”。

1. conscious awareness 自觉意识；清醒的认识

Teachers of advanced reading should develop *a conscious awareness* of the syntax of written English. 教高级阅读的教师，应该特别注意书面英语的句法.

1. determine [dɪˈtɜ:mɪn] v.是…的决定因素

What determines whether you are a career success or a failure? 事业的成败取决于哪些因素？

1. onset [ˈɒn-set] n.（尤指不快之事的）开始，开端，肇始

With *the onset* of war, oil prices climbed past $30 a barrel. 战争一爆发，油价就攀过了每桶30美元。

1. range n.幅度;等级;范围

→a piece of writing or speech ranges over a group of topics, （文章或讲话）涉及，包括

→（v.）things range between two points / or range from one point to another, （在一定幅度内）变化，变动

1. complexity [kəmˈplek-səti] n.复杂性;错综复杂
2. distinction [dɪˈs-tɪŋk-ʃn] n. ①荣誉（称号），殊勋，勋章。②区别，差别，不同点

①分别;差别;不同（*A distinction* between…）。②卓越;杰出;优秀。③特殊奖励;荣誉;光荣。④特质;特点

Lewis emerges as a composer作曲家 of distinction and sensitivity. 刘易斯作为一位悟性很高的优秀作曲家崭露头角。

The order was created in 1902 as a special distinction for eminent men and women... 该勋位设立于1902年，作为一项殊荣授予杰出的男性和女性。

He has *the distinction* of being regarded as the Federal Republic's greatest living writer. 他才华横溢，被誉为联邦共和国目前尚在世的最伟大的作家。

1. A range of things （同类事物的）一系列，一连串
2. not …, but rather … 不是…，而是…
3. novelty [ˈnɒvlti] n.①新奇性;新颖。②新奇的事物。③廉价小饰物;小玩意
4. predator [ˈpre-dətə(r)] n.①捕食性动物。②掠夺者；掠夺成性的人（或组织）。③<铁血战士>电影名
5. 低温环境下也能发生化学反应

Icy objects such as comets彗星 may have helped start life on Earth 方式状by delivering递送 *water* and *carbon碳-based molecules分子* to the young planet. Because putting something on ice doesn't necessarily必然地 keep it from changing变化: a new study finds that even in frigid极冷的, deep space environments, *simple hydrocarbon烃 molecules* can react作出反应 to become more complex ones. The process even works when temperatures drop to near absolute zero.

But just what kind of organic有机的 molecules would exist存在 on *the icy bodies* of a forming solar system? Researchers （at the Jet喷气式飞机 Propulsion推进力 Laboratory实验室 in Pasadena, California）, investigated作调查 how organic molecules might evolve演化 toward greater complexity（n.） even in the cold of interstellar星际的 space.

The scientists found that ultraviolet紫外线的 light, which radiates辐射 from stars and galaxies, can induce引起 rapid changes in icy hydrocarbon烃 molecules （cooled冷却 to 5 kelvin绝对温度单位—that's a frosty霜冻的 minus零下负的 451 degrees Fahrenheit华氏温度计的）（即摄氏-268.3度）.

The chemical reactions反应 resulted in导致造成 molecules of more complexity—which is the right direction to go if you want to eventually make amino氨基的 acids酸 and biological molecules. The study appears in the Astrophysical天体物理学的 Journal Letters.

It just goes to show—if you really want to freeze使冻结 something in place, you'd better encase包装 it in carbonite天然焦炭.

像彗星这样的冰状天体，曾给年轻的地球提供水和碳基分子，从而促进了地球上生命的起源。因为只提供冰层并不能有所改变：一项新的研究发现，即使在严寒的深太空环境中，简单的碳氢化合物分子也能发生反应，生成更复杂的化合物。即使在温度接近绝对零度时，反应也能发生。

但是哪种有机分子能存在于最初形成的太阳系的冰层里呢？加利福尼亚州帕萨迪纳喷气推进实验室的研究人员，调查了在寒冷的星际空间里，有机分子是如何进化成更高级的化合物。

科学家们发现，恒星和星系放射的紫外线，能够诱使冷却到5开尔文的冰态碳氢化合物迅速发生变化。5开尔文相当于零下451华氏摄氏度。

化学反应后产生更复杂的分子——如果你想最终得到氨基酸和生物分子，那么这就是正确的方向。这项研究发表在《天体物理学报通信》上。

这只是证明——如果你真想在太空里冻结某物，最好用焦炭材料来包装。

1. comet [ˈkɒmɪt] n. [天]彗星
2. carbon-based碳基； 基于碳； 碳为基础； 含碳的
3. molecule [ˈmɒlɪ-kju:l] n. 分子；微小颗粒
4. keep sb from doing sth 防止某人做某事（=stop sb. from doing sth. =prevent sb. from doing sth.）

keep sb doing sth使某人一直做某事

1. frigid [ˈfrɪ-dʒɪd] adj.①寒冷的;极冷的。②(女子)性冷淡的。③拘谨的;冷淡的;不友好的
2. hydro-carbon [ˌhaɪ-drə-ˈkɑ:bən] n.碳氢化合物;烃（tīng）有机化学上碳氢化合物的总称（“碳”、“氢”二字连读）。

属易燃易爆品。所有的烃都是憎水的,即所有的烃都不溶于水。

1. re-act v.

→you react to something that has happened to you, （作出）反应；回应

→you react to a substance such as a drug, or to something you have touched,产生不良反应;过敏

→you react against someone's way of behaving, 反抗;不服;反对

→one chemical substance reacts with another, or when two chemical substances react, 起（化学）变化;发生（化学）反应

1. pro-pulsion [prəˈpʌl-ʃn] n. 推进；推进力
2. inter-stellar [ˌɪntə-ˈste-lə(r)] adj. ①星际的；恒星际。②《星际穿越》电影名
3. ultra-violet [ˌʌltrə-ˈvaɪə-lət] adj.紫外的；紫外线的；产生紫外线的
4. radiate [ˈreɪ-di-eɪt] v.①辐射；(从中心)发散。②散发（热）；发射（光）。③流露，显示（情感）
5. kelvin n. 开（开尔文温标的计量单位，常用符号K表示。它以绝对零度-273.15℃作为计算起点。所以开尔文温度和人们习惯使用的摄氏温度相差一个常数273.15，即T=t+273.15（t是摄氏温度的符号））；绝对温度单位。
6. frosty [ˈfrɒsti] adj.①霜冻的;严寒的。②结霜的;被霜覆盖的。③冷淡的;冷若冰霜的
7. Fahren-heit [ˈfærən-haɪt] adj. 华氏温度计的；华氏的

符号℉，德国人华伦海特制定了华氏温标，他把一定浓度的盐水凝固时的温度定为0℉，把纯水的冰点（ice point）温度定为32 ℉，把标准大气压下水的沸点(boiling point)温度定为212℉，中间分为180等份（212-32=180），每一等份代表1度，这就是华氏温度。

1. amino [ə'miːnəʊ] adj. <化>氨基的
2. encase [ɪnˈkeɪs] v.把…包住;把…封起来
3. carbo-nite ['kɑ:bə-naɪt] n. 碳质炸药；硝酸甘油；天然焦炭
4. 美航局红外探测器统计黑洞数量

Black holes are common常见的. But actually事实上 counting数一数 them is no easy task. Even the brightest can be hard to see. Of course, “bright black holes” is a bit of an oxymoron矛盾修辞法. But when supermassive特大质量的 black holes （at the center of a galaxy） feed吃食, the material （falling into them） heats up变热, giving off放射出 a bright glow across the electromagnetic电磁的 spectrum光谱.

Infrared红外线的 light （in particular特定的） is good to look for when black-hole hunting猎食. Some feasting饱餐中的 black holes are obscured遮蔽 by gas and dust, which absorbs吸收 much of their glow—but they still shine发出光 in the infrared红外线.

It's no surprise, then, that NASA's infrared红外线的 WISE spacecraft found a bunch一大批. WISE launched in 2009 to survey测绘 *the entire全部的 sky* in the infrared红外线. Now researchers have used WISE data to countthe luminous发亮的 black holes in a well-known corner of the sky called the COSMOS field. In just that tiny region, WISE found about 130 glowing black holes, or active galactic星系的 nuclei核心. The study will appear in the Astrophysical天体物理学的 Journal.

Extrapolating推断 from this small area, at least two million active black holes dot散布于 the sky, confirming证实 that these extreme astrophysical objects are common indeed确实.

黑洞是普遍存在的现象。但实际上要统计黑洞的数量并非易事。即使最耀眼的地方也很难看见。当然，用明亮来修饰黑洞有点矛盾。然而，当星系中心质量超级大的黑洞“吞食”时，落入其中的物质便会升温，发出一道明亮的光，通过电磁波频谱可以显示出来。

在黑洞“捕捉”物质时，红外线尤其容易被找到。一些正在“享受盛宴”的黑洞被气体和灰尘所遮蔽，它们吸收掉大多数光线——但仍会发出红外光线。

美国宇航局的“智慧号”红外探测器发现了许多这类光线，这并不足以为奇。“智慧号”发射于2009年，用以探测整个天空的红外线。现在研究人员已经使用“智慧号”发送的数据计算著名的天空一角——被叫做COSMOS领域里的黑洞数量。在这块微小的区域，智慧号发现了130个发光的黑洞或活动星系核。这项研究将出现在天文物理期刊上。

根据这块小区域可以推断，天空中至少散布着200万个活跃的黑洞，这也证实了这些极端天体的存在确实很普遍。

1. oxymoron [ˌɒksɪ-ˈmɔ:rɒn] n. 矛盾形容法，逆喻
2. give off 释放，放出，发出（气体、热量、气味等）
3. electro-magnetic [ɪˌlek-trəʊ-mæg-ˈnetɪk] adj.电磁能的;电磁效应的
4. spectrum [ˈspek-trəm] n. ①光谱；波谱；②范围；系列
5. Infra-red [ˌɪnfrə-ˈred] adj. n. <物>红外线的。对红外辐射敏感的。n. 红外线
6. feast [fi:st] v.饱餐;尽情地吃;大快朵颐（you feast on a particular food,）。n. 宴会;筵席;盛宴
7. bunch [bʌntʃ] n. 束，串，捆。v. 聚成一串，形成一串；聚成一组；使起褶：使（织物）起褶

A bunch of people 一伙，一群（人）

A bunch of flowers一束（花）

A bunch of bananas or grapes 一串（香蕉或葡萄）

A bunch of keys 一串（钥匙）

A bunch of things大量；大批

1. luminous [ˈlu:mɪ-nəs] adj.发光的；发亮的
2. nuclei ['nju:klɪaɪ] n. 核，核心，原子核
3. extrapo-late [ɪkˈs-træpə-leɪt] v. （由已知资料对未知事实或价值）推算，推断（you extrapolate from known facts,）
4. dot n.点;小点;小圆点。v.散布于;星罗棋布于;遍布
5. 轻音乐降低进食量

In lab tests, music and lighting can affect how much people eat. Now a study has found that {changing the ambiance氛围 of *a fast food restaurant* to more of *a fine-dining atmosphere* } lessened使减少 the amount of food （people crammed把…塞进 into their *pie holes*嘴）. To quote引述 the paper, “softening使变柔和 the lighting and music led people to eat less, to rate the food as more enjoyable令人愉快的, and to spend花费 just as much一样多.”

That last finding means that fast food joints廉价娱乐场所, which are accused of contributing to the obesity肥胖 epidemic（n.）泛滥, might actually try it. The study was led by well-known eating behaviorist *Brian Wansink* from Cornell康乃尔 University / and appears发表 in the journal Psychological Reports.

The researchers converted part of a Hardee's so that it had soft lighting and slow jazz instrumentals器乐. The patrons顾客 were expected to possibly eat more in the relaxed section部分, because they'd linger逗留, maybe get dessert甜点. But they actually averaged 18 percent fewer calories per meal than the folks in the rowdy吵闹的 section—down from an average of 949 calories to 775. The overall experience appears to have been a more satisfying令人满意的 meal. Even if there was less of it.

在实验室测试中，音乐和灯光能影响人们的进食量。如今有一项研究发现，将快餐店的环境气氛改装得更精美，会使人们减少填进肚子里的食物总量。引用研究论文上的话“柔和的灯光，轻盈的音乐会使人们减少进食，但会提高食物的档次，消费仍然不减。”

最后一项发现意味着快餐连锁店可能会试一试。快餐店被指控是导致肥胖症的元凶。这项研究由来自康奈尔大学的知名饮食行为学家布莱恩·文森克引导，并发表在心理科学报告上。

研究人员改变了哈迪快餐厅的部分区域，使这里的灯光更柔和，播放的音乐也以慢爵士乐器为主。预计顾客在休闲区进食更多，因为在这里有活动区域，还可能吃到甜品。但实际上，相比在吵闹的区域进食的顾客，这里的顾客平均每餐少消费18%的卡路里，从平均的949卡路里降至775卡路里。总体来说，这顿饭似乎更令人满意。即使进食量减少了。

1. ambiance ['æmbɪəns] n. 周围环境，气氛
2. lessen [ˈlesn] v.（使）缩小；（使）减少；（使）减轻

Make sure that your immunisations are up to date to lessen the risk of serious illness. 要确保接种最新的疫苗，以降低患上严重疾病的危险。

1. cram （into） [kræm] v.把…塞进;使塞满。挤进;拥进

→you cram a hat on, (尤指匆忙地)戴上(帽子)

→you are cramming for an examination, (为应考)临时死记硬背，填鸭式学习

1. pie hole n. （俚）嘴
2. joint n.廉价娱乐场所；下等娱乐场所

They had come to the world's most famous pick-up joint... 他们来到了全世界最有名的寻花问柳之地。

...a hamburger joint. 汉堡包店

1. epidemic [ˌepɪˈdemɪk] n.①（疾病的）流行，传播（*an epidemic* of a particular disease somewhere,）。②（坏事的）盛行，泛滥，猖獗

A flu epidemic is sweeping through Moscow. 一场流感正席卷莫斯科。

1. patron [ˈpeɪ-trən] n.①（艺术家、作家和音乐家等的）赞助人，资助人。②（酒吧、旅馆等的）主顾，顾客
2. section n.①部分。②(文件的)节,章;(法律的)条，款，项。v.把…切成片;把…分成段(或组等)

It holds vegetables in place [while they are being peeled or sectioned]. 将蔬菜削皮或切片时，用它来固定。

1. linger v. ①继续存留。②留恋；不愿离开；继续逗留

The scent of her perfume lingered on in the room... 她的香水味道在房间里久久不散。

1. dessert [dɪˈzɜ:t] n.（饭后）甜点
2. rowdy [ˈraʊdi] adj.吵闹的;粗野的;惹是生非的
3. 中年健身为老年健康投资

Being physically身体上 active（adj.） has numerous benefits. Now a study has looked closely密切地 at *the effects* of fitness身体适应能力 in the midlife years for preventing debilitating使衰弱 chronic慢性的 diseases later.

The ongoing进行中的 study gathered fitness健身 stats统计数字 for more than 18,000 adults, and followed their health status into old age. Assessing评估 40 years of that data, the analysis finds that {those who had *higher fitness levels* in their 30s, 40s and 50s} were substantially总的来说 less likely to have *a chronic慢性的 condition健康问题* between the ages of 70 and 85. The findings are in the Archives档案 of Internal体内的 Medicine.

*Physical fitness* seemed to stave off延缓 heart disease and heart failure（n.）衰竭, which might not be a big surprise. But it also reduced rates of diabetes糖尿病, kidney肾脏 disease and even Alzheimer's老年痴呆症 disease.

Current recommendations（n.）推荐 suggest adults make time for at least 20 minutes of *moderate适度的 to vigorous（体育活动）强度大的 physical activity* a day, such as fast walking, jogging慢跑, biking or swimming. *Busy middle-aged people* might find it especially hard to make time for such exercise. But a small investment looks like it could pay big health dividends红利 for decades to come.

活动身体有许多益处。如今有一项研究仔细观察了中年人健身对以后，身体预防慢性疾病的影响。

这项研究还在进行中，期间共收集了超过一万八千名成人的健身资料，并跟踪他们步入老龄期的健康状况。评估分析了40年的数据后，研究人员发现，那些在30至50岁期间经常锻炼的人，活到70—85岁时患上慢性疾病的几率大大减少。这项研究发表在《内科医学档案》上。

健身似乎能抵御心脏病和心力衰竭，这早就不让人感到新奇。然而健身还能降低糖尿病、肾脏疾病，甚至是阿尔茨海默氏症的患病几率。

目前的建议是，成年人至少每天腾出20分钟做中度或者剧烈运动，例如快走，慢跑，骑自行车或者游泳。繁忙的中年人可能很难腾出时间来锻炼。但看起来很小的投资会为你今后几十年的健康带来很多益处。

1. fitness [ˈfɪtnəs] n. 身体适应能力；身体素质

They’re doing exercises to improve their fitness. 他们为增强体质而做体操。

1. debilitate [dɪ-ˈbɪlɪ-teɪt] v. 削弱（组织、社团或政府）的力量

→you are debilitated by something such as an illness, 使虚弱;使衰弱

1. stats=statistics n.统计学，统计表，统计数字(或资料)
2. assess [əˈses] v.①评估；评价；考查。②评估（价值）；估价

Our correspondent has been assessing the impact of the sanctions... 我们的记者一直在评估制裁带来的影响。

What's the property's *assessed value*? 这些财产的估值是多少？

1. stave off 推迟；延缓；暂时避开
2. moderate [ˈmɒdə-rət] adj. ①(政治观点或政策)温和的，不激进的。②(人或团体)温和的，稳健的。③中等的;普通的;适度的；适量的
3. 银河系和卫星星系的排列很罕见

Our *Milky Way galaxy* has two large satellite（n.）卫星 galaxies orbiting绕转 it. They're known as the Large and Small Magellanic（adj.）麦哲伦的 Clouds. And humans have been aware of the existence of these celestial天体的 objects for at least a millennium一千年.

Recently, researchers were curious好奇的 about whether our configuration构造 is fairly相当地 typical典型的, or an astronomical天文学的 anomaly（n.）反常. In other words, is our corner of the cosmos宇宙 ordinary（adj.）普通的?

Now a new study finds that *the Milky Way* and *its companion同伴 galaxies* are an unusual combination（n.）组合, but they're not one of a kind.

Astronomers in the U.K. and Australia looked at thousands of galaxies to try to find an analogue相似物 of our arrangement排列. The search turned up发现 two close replicas复制品: each with a Milky Way–like galaxy （accompanied by two galaxies （comparable可比得上的 to the Magellanic Clouds））.

But the researchers also concluded断定 that such arrangements are pretty rare. Only half a percent of Milky Way–like galaxies have companions同伴 like ours.

The Magellanic Clouds may be transitory暂时的 features. In a few billion years the Milky Way may absorb吸收 them completely. So someday *our corner of the cosmos* could be pretty ordinary after all.

有两大卫星星系环绕着我们的银河系转动。它们以大小麦哲伦云为人们所知。人类意识到这些天体的存在至少有一千年了。

近期，研究者对银河系的构造表示好奇。我们的星系是非常典型的宇宙产物，还是异常的天文现象？换句话说，我们这个宇宙的一角平常吗？

现今，一项新的研究发现，银河系及其卫星星系是不同寻常的组合。但也不是独一无二的。

英国和澳洲的天文学家观察了上千个星系，试图找到另一处类似于银河系的排列。这次研究找到了两个类似的星系：每个星系均像银河系一样，环绕着能与麦哲伦云相媲美的卫星星系。

但研究人员也作出结论，这样在排列方式相当少见。只有0.5%的星系像我们银河系一样有同伴。

麦哲伦云可能是暂时性的天文特征。再过几十亿年，银河就会完全将它们吞没。因此，到那天，我们这个宇宙一角会变得很普通。

1. Magellanic [mæɡə-ˈlæ-nik] adj. （葡萄牙航海家）麦哲伦的
2. celestial [səˈles-tiəl] adj.①天体的;天空的;天的。②了不起的;美妙的;奇妙的

Gravity governs *the motions* of celestial bodies. 万有引力控制着天体的运动。

...a chocolate cake with an apricot filling and *celestial effect* on the taste buds. 味道妙不可言的杏仁夹层巧克力蛋糕

1. millennium [mɪˈle-niəm] n.一千年;千年期
2. configuration [kənˌ-fɪgə-ˈreɪʃn] n.①安排;格局;布局。②配置
3. fairly adv. ①相当;还;尚。②(用在形容词和副词前，代替very,表示强调，但比 very 语气弱)有些，有点，还算。③(表示强调)在很大程度上，简直。④简直;几乎可以说

We did fairly well but only fairly well. 我们做得还过得去，但也仅仅是过得去而已。

You've got to be fairly single-minded about it... 对这事你还得专心一点。

He fairly flew across the room... 他简直是飞过了房间。

[After I had read the book] I could fairly claim to be an expert. 读完这本书，我差不多可以说是专家了。

1. turn up ①(常指出其不意地，或经长久等待后)出现，到来，露面。②找出;发现;注意到;出现。③开大，调高(收音机、暖气等)

This is similar to waiting for a bus that never turns up. 这就跟等待一辆永远等不到的公共汽车差不多。

Investigations have never turned up any evidence. 调查从没发现任何证据。

1. comparable [ˈkɒm-pərə-bl] adj. 可比较的；比得上的

By contrast, *the comparable figure* for the Netherlands is 16 per cent... 相反，荷兰的可比相对数字为16%。

1. transitory [ˈtræn-sə-tri] adj.短暂的;转瞬即逝的;昙花一现的
2. 为什么会选择手上的商品

You just bought peanut花生 butter黄油. You chose the jar罐子 because, well, you've always eaten the crunchy松脆的 variety品种. In reality现实中, however, something else may have influenced your choice—the product you picked was centrally在中心地 located坐落于 on the store shelves.

Researchers tracked *eye movements* of 67 subjects （scanned a 3 by 3 matrix of fictitious虚构的 brands）. The tracking found that consumers tend to focus on the objects in the middle—specifically确切地说, five seconds before they make their choice. And they do this for all kinds of products, from vitamins to online movies. The study will be published in December 2012 in the Journal of Consumer Research.

Also, subjects continued to go for挑选 the centrally-located brand even if the product was not in the middle of their specific特定的 visual field. So it's not in reference to关于 one's view, it is literally真正地 about *the product* being central中央的 within the entire整个的 shelf layout布局.

Past studies have shown that people tend to make a lot of choices based on central locations, like choosing the middle bathroom卫生间 stall小分隔间 in a public washroom厕所, a middle seat at a table, or even *the middle items* in a series of arbitrary随意的 objects.

*The test consumers* had no conscious awareness {that they had chosen *centrally located brands*}. Makes you wonder what you've taken home without realizing why.

你刚买了花生黄油。你选择这罐，是因为你总是食用这种易碎的品种。然而在现实生活中，其它某些因素可能影响了你的选择——你拿到的产品摆放在货架的正中间。

研究人员追踪了67名被试者，让他们浏览3\*3排列的9个虚拟品牌，与此同时观察他们的眼部运动。追踪结果显示，消费者倾向于关注中间的物品——尤其是在做出选择的前5秒。从维生素到在线电影，他们在挑选所有产品时是均是这样。这项研究将于2012年发表在《消费者研究》期刊上。

并且，被试者仍会选择放置在中间的品牌，即使它们并不在视野中央。因此这与视野没有关系，而是与货架整个布局的中心有关。

过去的研究显示，人们倾向于根据中间位置选择商品，就像选择公共厕所中间的隔间，桌子中间的座椅，或者是一系列任意对象的中间项。

被试的消费者没有意识到自己选择了置于中间位置的品牌。你不禁产生疑惑，怎么没有注意到为什么就把它带回家了。

1. peanut [ˈpi:nʌt] n. 花生；微不足道的人，小人物；很少的钱
2. crunchy [ˈkrʌntʃi] adj. (食物)硬脆的，松脆的
3. variety n. ①变化;多样化。②品种;种类。③综艺表演;综艺节目
4. go for ①选择；挑选。②非常喜欢；倾心于
5. with reference to / in reference to 关于…

I'm calling in reference to your series on prejudice. 我打电话是要谈谈你写的有关“偏见”的系列文章。

→reference n. v. 参考；参考书；提及，涉及

1. arbitrary [ˈɑ:bɪ-trəri] adj.武断的;任意的;任性的;主观的

The victims were not chosen arbitrarily（adv.）. 下手对象不是随便选择的。

1. "糖衣"延长香蕉寿命

One day the banana is perfect. Bright yellow, firm结实的, flavorful充满…味道的. But [even within the same day] *brown棕色的 spots* appear on your perfectly完全地 ripe banana, its flesh果肉turns mushy软塌塌的, and it's destined（adj.） for命中注定的 the compost肥料 or at best, banana bread.

But scientists are developing a way to extend延伸 the life of bananas. It's a spray-on coating涂层 made from chitosan壳聚糖——a substance物质材料 （found in crab螃蟹 and shrimp小虾 shells壳）. The new gel凝胶 can be sprayed on把…喷在…上 bananas to slow *the ripening process* by up to 12 days.

Like other fruit / bananas remain alive after being picked / and they actually continue to respire呼吸. This means they take in吸收 oxygen and release carbon dioxide二氧化物. *The more* the banana breathes *the faster* it ripens使成熟 and then rots使腐烂. Bananas ripen more quickly than most fruit / because they don't naturally顺理成章地 slow the respiration呼吸 [after being picked], in fact it speeds up, giving bananas 宾补their notoriously臭名昭著地 short *shelf life*保存限期.

Chitosan壳聚糖 not only kills *the bacteria on banana's skin* that then leads to rot, it also significantly slows down the respiration呼吸 *in the first place*从一开始. So bananas won't drive you bananas发狂的.

有一天香蕉成熟了，这时它很完美。金黄，坚挺，味道可口。但是即使是在香蕉熟透的当天，香蕉皮上会出现棕色斑点。果肉变成泥，注定要成为肥料或者做成香蕉面包。

然而科学家们正在开发一种延长香蕉寿命的方式。这是一种由壳聚糖做成的喷雾涂层，壳聚糖是在螃蟹和虾子体内发现的一种物质。这种凝胶可以喷洒在香蕉上，将香蕉的成熟过程放慢至12天。

和其它水果一样，采摘之后香蕉还是活的，它们还能继续呼吸。这时的呼吸是指吸进氧气吐出二氧化碳。香蕉呼吸的越快，成熟得越快，然后烂得越快。香蕉比一般水果成熟的快，因为在采摘之后它们并不自然地放慢呼吸，相反它们会加速呼吸，这就造成香蕉臭名昭著的短寿。

壳聚糖不仅杀死了香蕉表皮细菌，这些细菌会诱使香蕉腐烂，同时显著地放缓了香蕉呼吸的节奏。因此香蕉不会再让你抓狂。

1. perfectly adv. 完全地，十足地（尤用于所说的话可能会受质疑时）

They made it perfectly clear that it was pointless to go on... 他们非常明确地表示继续下去毫无意义。

1. destine ['des-tɪn] vt. 注定；指定；命定；预定
2. destined [ˈdes-tɪnd] adj. 命中注定的，预定的；去往…的

→something is destined to happen / or if someone is destined to behave in a particular way, （命中）注定的;一定的

He feels that he was destined（adj.） to become a musician... 他觉得自己注定会成为一名音乐家。

Everyone knew that Muriel was destined（adj.） for great things. 所有人都知道缪里尔命中注定要成就一番伟业。

→someone is destined for a particular place, or if goods are destined for a particular place, 去（或运）往（某地）的

...*products* destined for Saudi Arabia. 运往沙特阿拉伯的产品

1. coating n.涂层;覆盖层
2. chitosan ['kaɪ-tə-sæn] n. 壳聚糖；聚氨基葡萄糖
3. dioxide [daɪ-ˈɒk-saɪd] n. [化]二氧化物
4. respiration [ˌres-pə-ˈreɪʃn] n. 呼吸，一次呼吸
5. noto-riously [nəʊ-'tɔ:-rɪə-slɪ] adv. 恶名昭彰地；声名狼藉地；著名地；众所周知地
6. shelf life n. （包装食品的）货架期，保存限期
7. in the first place 首先，从一开始
8. bananas n.香蕉。adj. 发狂的，疯狂的，糊涂的

Adamson's going to go bananas on this one. 亚当森会被这个气疯的。

1. 怀孕改变体内微生物组织

Having a kid changes everything, from your sleep schedule日程安排 to the status of that formerly原先 spare room备用卧室. The stable马厩 of bacteria （that live in a woman's gut内脏） is also transformed改变 when their host主人 becomes pregnant怀孕的. So finds research in the journal Cell.

The study looked at审视 *women* （in Finland芬兰）. The women's *microbial makeup*组成成分 changed dramatically引人注目地 between the first and third trimesters三个月期. *The array of microbes* in the gut went from looking normal [in the first three months of a pregnancy] to resembling与…相似 what's found in patients病人 （suffering from metabolic新陈代谢的 disease） in the last three.

But some of the symptoms征兆 of that condition—like weight-gain and slower *sugar metabolism*（n.）新陈代谢——can be beneficial有益的 to pregnant women, supporting支撑 *energy storage*储藏 that helps a fetus胎儿 develop. Other symptoms, like inflammation炎症, demonstrate证明 that *the immune免疫的 system* is functioning运转 properly正确地 as a pregnancy comes to term临产.

Scientists don't yet fully understand what brings about导致 the changes in gut bacteria细菌—immune function免疫功能 is a suspect可疑分子, but *factors* like hormonal signals aren't ruled out排除…的可能性. The research suggests that other changes to the body, like puberty青春期 or old age, could also bring about microbial由细菌引起的 makeovers改头换面.

有了孩子一切就变了，不仅睡觉时间变得不规律，之前空余的房间也会大变样。女人怀孕后，寄生在肠道里的细菌的稳定性，也在悄然改变。在《细胞》杂志上可发现这项研究。

研究中观察了芬兰的妇女。在早期妊娠和晚期妊娠之间，妇女们的微生物组织方面发生了巨大的改变。肠道内的微生物种类，从怀孕前三个月的正常，发展到后三个月与患有新城代谢疾病的病人类似。

但是这种情况下的某些症状，比如说体重增加和糖类代谢缓慢，都对孕妇身体有益处，有助于孕妇储存能量，以促使婴儿发育。其他一些症状，比如说炎症，就说明在怀孕过程中免疫系统功能正常。

科学家们并不完全了解肠道细菌的变化因什么引起——免疫功能只是一种猜测，而且荷尔蒙信号这类因素也不能排除。这项研究显示身体的其他变化，比如说青春期和老龄期，也能引发体内微生物发生巨变。

1. stable n. (繁殖、训练赛马的)养马场。adj. 稳定的;稳固不变的
2. transform的基本意思是“改变”,指使人或物在性质上或形态上，发生彻底或根本的积极的变化，常指突然或神秘地改变，有时含有夸张的意味。

→To transform something into something else 转换;改变;改造

→改善;使改观;使改头换面

A cheap table can be transformed by an interesting cover… 一块趣味盎然的桌布就能使一张廉价桌子面目一新。

1. tri-mester [traɪ-ˈmes-tə(r)] n.三个月(左右)时间; (一年三学期制的)学期。三月期：通常用于妊娠
2. fetus ['fi:təs] n. 胎，胎儿
3. properly [ˈprɒ-pəli] adv.①正确地；准确地；令人满意地。②适宜地；合适地；得体地；恰当地

You're too thin. You're not eating properly... 你太瘦了。你的饮食不合理。

They will be concerned to do the right thing — to dress properly, for instance. 他们需要注意行为是否恰当——比如说，穿着得体。

1. term n.怀孕期;足月;临产The term of a woman's pregnancy is the nine month period that it lasts. Term is also used to refer to the end of the nine month period.
2. To bring something about 导致；引起

{The only way they can bring about political change} is by putting pressure on the country. 要使该国进行政治变革，唯一的办法就是向其施压。

1. rule out ①用直线划掉；宣布…不可能，排除…的可能性。②阻止…发生;使…成为不可能

Local detectives have ruled out foul play. 当地的侦探已经排除了他杀的可能性。

1. puberty [ˈpju:bəti] n.青春期；发育期
2. makeover n.①（通常指通过专业人士作出的）外表的改观，美容，改头换面。②重大改造；革新

*The biggest makeover* has been in TV drama. 最大的变革发生在电视剧行业。

1. 睡眠不足影响疫苗反应

You've probably noticed you're more likely to catch a cold if you pull a lot of all-nighters通宵熬夜. But *lack of sleep* can also compromise使陷入危险 your *immune免疫的 system's response* to vaccines疫苗. And in some cases, make the shots注射 useless. *So says a study* in the journal Sleep.Researchers gave *125 healthy, middle-aged men and women* the Hepatitis肝炎 B vaccine疫苗——*a three-part vaccine* given at one, two and six months. And *during that time*, volunteers tracked their sleep habits.

Six months after the final booster助推器, researchers took blood samples to see if the patients had rallied召集 sufficient numbers of antibodies抗体 against Hep-B乙肝疫苗. Eighteen patients had not—the vaccine疫苗 had failed. Turns out结果发现 the vaccine was almost 12 times倍 as likely to fail in volunteers （who regularly slept fewer than six hours a night） compared to与…相比 those （who snoozed小睡 more than seven）.

Makes sense是合情合理的, because *previous studies* have shown that sleep deprivation（n.）剥夺 cuts numbers of B and T cells—which coordinate使协调 *the immune system's attack* on bad guys. So remember, vaccines疫苗 aren't magic. You still need a good night's sleep to give 'em有效的微生物群 a fair shot一个公平的机会.

你可能会意识到这种情况：如果你经常熬夜的话，会更容易患上感冒。睡眠不足会损害免疫系统对疫苗的反应。而且在某些情况下，使打针失去应有的效果。上述研究发表在《睡眠》期刊。

研究人员让125名中年男女注射了乙肝疫苗，这种疫苗全程共接种3针，按照1，2，6个月程序。在此期间，让志愿者们记录自己的睡眠习惯。

打完最后一针疫苗的六个月后，研究人员采集血液样本，看病人是否有足够数量的抗体来对抗乙肝。18名病人没有足够数量的抗体，免疫失败。事实证明，与那些酣睡7个多小时的病人相比，睡眠时间长期少于6小时的病人免疫失败的概率，是前者的12倍。

这在情理之中，因为之前的研究证明，睡眠不足会减少B细胞和T细胞的数量，而这些细胞与免疫系统合作共同抵御疾病入侵。因此记住，疫苗不是万能的。你仍然需要高质量的睡眠，好给疫苗一次公平的机会。

1. pull an all-nighter 通宵熬夜
2. compromise [ˈkɒm-prə-maɪz] n.折中;妥协;让步

→（v.）you compromise with someone, 妥协;作出让步

'Nine,' said I. 'Nine thirty,' tried he. We compromised on 9.15... “9点。”我说。“9点半。”他试着说。于是我们各让一步，定在了9点一刻。

→someone compromises themselves or compromises their beliefs, 使（自己）声誉受损;违背(信念) ；（尤指因行为不很明智）使陷入危险

He would rather shoot himself than compromise his principles. 他宁愿一枪打死自己也不愿违背自己的原则。

1. vaccine [ˈvæk-si:n] n. adj. 疫苗，痘苗
2. Hepatitis [ˌhepə-ˈtaɪ-tɪs] n. 肝炎
3. rally [ˈræli] v. ①召集，集合。②振作；恢复

→people rally to something or when something rallies them, v.一致支持；团结起来

His supporters have rallied to his defence... 他的拥护者团结起来为他辩护。

He rallied enough to thank his doctors... 他身体好得差不多了，于是去感谢他的医生。

1. Make sense ①有道理；有意义；讲得通。②是明智的, 是合情合理的。③表述清楚；易于理解；道理明显

This sentence doesn't make any sense. 这个句子没有意义。

It would make sense to leave early. 还是早点走好。

Can you make sense out of what this book says? 你能理解这本书的内容吗?

1. em有效的微生物群 (Effective Microorganisms)；
2. a fair shot 一个公平的机会
3. 彩色标签帮助消费者选择健康食物

You might not know how many calories were in that sandwich夹心面包片. But if you got lunch at the Massachusetts马萨诸塞州 General Hospital cafeteria自助餐厅, you could tell [with one glance] whether you'd made a healthful choice: offerings are color-coded用不同色彩作标记或分类.

*Simply posting calories* does not always get consumers to make healthier choices. So researchers tried something different.

Mass General's cafeteria food and beverage饮料 options可选择的事物 were classified分类 as least最少量, somewhat稍微有些 or most healthful [with red, yellow or green labels]. Green is healthiest. Researchers then tracked some 4,600 employees.

[About six months after] the changes were made, the purchases of *"red" label food* decreased by more than 15 percent, and "red" beverages dropped by 39 percent. "Green" food and drink purchases increased, according to the study in the American Journal of Preventive预防的 Medicine.

{Making *healthy food choices* easier} could especially help the poor， the undereducated受教育不足的, the very populations （most affected by the obesity肥胖 epidemic（n.）盛行泛滥）. *Mass麻省 General总部的 employees* from those groups made the biggest improvements.

也许你并不知道那个三明治里含有多少卡路里。但如果你去马萨诸塞州总医院的自助餐厅吃午饭，你一眼就能辨别自己的选择对不对：供应的食物均标有彩色编码图。

仅仅只贴上卡路里含量的标签，并不能保证让消费者选择更健康的食物。因此研究者尝试了与众不同的做法。

麻省总医院自助餐厅，对供应的食物和饮料做了最细的分类，比如说，根据食品的健康程度分别贴上红色，黄色或者绿色的标签。绿色代表的食物最健康。然后研究者追踪了大约4600名雇员。

发表在《美国预防医学期刊》上的一项研究表明，做出改变后的第六个月，贴有红色标签的食物销量减少了15%，“红色”的饮料销量减少了39%。“绿色”食物和饮料的购买量增加了。

让人们更容易得选择健康食物，尤其会帮助穷人，未受教育者，以及受肥胖症影响最严重的人群。麻省总医院的这群员工做出了最大的改进。

1. 望远镜观测系外行星和天体物理学现象

At two high-altitude海拔高度 sites, in two countries, two very different telescope projects have come online to scan the skies.

At Palomar山名 Observatory天文观测站 in San Diego County, a new instrument on the Hale Telescope is looking for exoplanets太阳系外行星. Called Project 1640, it’s designed to blot out遮蔽 the infrared红外线的 light of a star, without blocking the light from anything else. That allows astronomers天文学家 to directly observe观察 exoplanets, even though the star is thousands or even millions of times brighter.

Most known exoplanets have been discovered by indirect间接的 means, but planetary与行星有关的 scientists believe they can learn a lot more from direct observation.

Over在…的上空 in Namibia纳米比亚, meanwhile, a new telescope called HESS II is seeking out higher-energy photons光子. The 28-meter telescope is designed to identify识别 very high energy gamma rays. And gamma rays, the most energetic 精力充沛的 kind of electromagnetic电磁的 radiation辐射, already pack打包 a pretty good wallop（n.）冲击力.

The gamma rays HESS （sees） are mostly by-products副产品 of extremely violent astrophysical天体物理学的 events such as supernovae超新星 and flaring闪耀的 black holes.

HESS and Project 1640 differ相异 in method and motive. But for astronomers （studying exoplanets or extreme astrophysics）, the new projects represent代理象征着 two more eyes on the sky.

为了观测天空，分别在两个国家的高海拔地区，建立了截然不同的望远镜项目。

海耳望远镜坐落在圣迭戈乡村的帕洛玛天文台上，它上面最新安装的仪器，正在寻找系外行星。这个项目就是“1640”计划，旨在遮挡来自恒星的红外线，同时并不阻断从其他物体发出的光线。这就使天文学家能够直接观测系外行星，尽管恒星比行星要亮一千倍甚至上百万倍。

众所周知，系外行星是通过间接方式发现的，但是行星科学家们相信，通过直接观测会了解到更多。

与此同时，在纳米比亚上空，一个叫做“HESS II”的新式望远镜正在寻找高能光子。这架高28米的望远镜被设计用来辨别高能的伽马射线。伽马射线是一种极其活跃的电磁辐射，它聚合的冲击力相当强。

HESS观测到的伽马射线大多数是极端猛烈的天体物理现象的副产品，比如说超新星的爆炸，以及燃烧的黑洞。

HESS和“1640”计划的不同之处在于观测方法和动机。但对于正在研究系外行星和极端天文物理现象的天文学家来说，这两个项目代表着两只监视天空的眼睛。

1. altitude[ˈæltɪ-tju:d] n. 高度，海拔高度
2. high altitude高空
3. planetary [ˈplænə-tri] adj.行星的；与行星有关的
4. photon [ˈfəʊ-tɒn] n. 光子，光量子
5. wallop [ˈwɒ-ləp] n.重击;狠揍；冲击力
6. flare [fleə(r)] n.闪光信号灯;照明弹。v. ①(火)突然烧旺，突然熊熊燃烧。②(麻烦、暴乱、冲突等)加剧，升级，愈演愈烈。③发怒;发火

Even as the President appealed for calm, trouble flared in several American cities. 尽管总统呼吁保持冷静，美国一些城市的骚乱仍有所升级。

→a disease or injury flares up, (疾病、伤势)突然复发，突然恶化

1. 分享时间 让自己拥有更多时间

Meetings, calls, kids, dogs, errands（n.）跑腿, exercise—and all those emails! Who doesn't feel starved使迫切需要 for time these days?

But a new study suggests that you can feel like you have more time—by donating捐献 some to others. The research is in the journal Psychological Science.

There really are only 24 hours in a day—*seven or eight* of which are (ideally) spent sleeping. And *a time commitment*承诺 does take time. But researchers found that if people felt like they had done something for others, their perception（n.）感知 was that they had gotten more done than people who killed time, spent time on themselves or got unexpected未预料到的 free time. And that made them feel like they had more time overall.

You don't even have to spend your whole Sunday volunteering自愿去做. *The helping tasks* in the study took only about 5 to 15 minutes. They included things like editing a student's essay随笔 or writing a note便条 to a sick生病的 child.

Time donators捐赠者 also felt like they could do more with their time, making them even more willing乐意的 to give time in the future.

会议，电话，孩子，宠物，运动——还有所有的邮件！这些天谁不觉得时间在飞逝？

然而一项新研究发现，通过将自己的时间奉献给别人，你就能感觉时间延长了。这项研究来自《心理科学》期刊。

一天确实有24小时，理想状态下，用于睡觉的时间7到8小时。信守时间确实花费时间。但是研究人员发现，如果人们在为他人做事，直觉让他们觉得相比那些浪费时间、将时间花在自己身上、或是有意外闲散时光的人，自己做得事情更多。这让他们感觉时间延长了。

你不必花一个下午特意去做志愿者。研究表明只需花5到15分钟帮助别人就足够了，能做的事情很多，包括帮学生修改作文，或者帮生病的小孩写请假条。

奉献时间也会使人感觉能利用有限的时间做更多事情，鼓励他们日后更多的分享时间。

1. errand [ˈe-rənd] n.（短程的）差事;跑腿

→（v.）you run an errand for someone, 为…跑腿；为…办事

1. starve [stɑ:v] v.挨饿;饿死。

→a person or thing is starved of something that they need, 使极其缺乏;使迫切需要

The most damaging thing （the West could do） is to starve Russia of new foreign capital. 西方能够祭出的最阴险一招就是不让俄罗斯得到新的外资。

1. donate [dəʊ-ˈneɪt] v. n.

you donate something to a charity or other organization, v.捐赠;赠送

1. perception [pəˈsepʃn] n.①理解；看法；认识。②洞察力；认识能力；悟性

perception作“认识,观念,看法”解时,可接that从句。

...*their perception* of foreigners. 他们对外国人的印象

It did not require *a great deal of perception* to realise the interview was over. 并不需要多少洞察力也能意识到面试已经结束了。

1. You don't even have to spend your whole Sunday volunteering自愿去做.

spend的宾语后常可接以介词in〔on,for〕引导的短语表示“把…花在…上”,介词宾语可以是「名词」,也可以是「动名词」。以「动名词」作宾语时介词in常可省略,尤其在口语中。

1. 北极光也能制造声音

Interesting sound. I would have guessed a Wild West performer演奏者 was practicing实行 with a bullwhip粗而长的鞭 while also并且 vacuuming用真空吸尘器打扫. But no. That sound is apparently显然地 produced by the aurora朝霞 borealis北方的, the northern lights北极光.

[Since 2000] *researchers* at Finland's芬兰 Aalto University have been collecting audio as part of what's called the Auroral极光的 Acoustics声学 project. Folk tales民间故事 have long held that长期以来一直认为 the lights also produce odd sounds, but the claims声称 were hard to prove. And some researchers thought that any noises （produced by the energetic充满活力的 particles微粒 that cause the light show） would be far too high in the sky 结果状to be heard on the ground.

But the latest results indicate表明 that *at least*至少 some sounds are produced very close to the ground. A setup of three ground-based microphones allowed researchers to estimate that the sounds occur发生 perhaps just 70 meters up. The results成果 were just presented展示 at *the International Congress代表大会* on Sound and Vibration震动 in Vilnius立陶宛共和国首都, Lithuania立陶宛.

More information about the sounds of the northern lights could lead to a more complete understanding of the phenomenon. So if you see an aurora, keep your ears耳 open.

听到这有趣的声音，我会联想到一个狂野的西部表演家，正一边挥舞着牛鞭，一边开着吸尘器。但是，我错了。很明显那声音是由北极光发出的。

自2000年，芬兰阿尔托大学的研究人员就开始收集光的声音，把这当作极光升学计划的一部分。很久以前，民间故事就坚信光能发出奇怪的声音，但却很难得到证实。另外，一些研究人员认为，形成北极光的高能粒子离地面太远，它们发出的声音因而无法被听到。

但最新的结果表明，至少有些声音在离地很近的地方产生。研究者凭借一套由三个放在陆面的麦克风组成的设备，估算出那些声响，发生在离地大约70米的高空。不久前在立陶宛首都维尔纽斯举办的国际声音和振动大会上，研究人员介绍了这项研究成果。

如有更多关于北极光声音的信息，人们便能全面地了解这种现象。所以，如果你看到极光，记得竖起耳朵倾听。

1. practicing ['præk-tɪ-sɪŋ] adj. 开业的，在工作的
2. bullwhip ['bʊl-wɪp] n.长而重的鞭子
3. vacuum [ˈvæ-kjuəm] n.①空位;空缺;空白。②真空。v.用真空吸尘器打扫

→something is done in a vacuum, 在封闭状态中;与外界隔绝

1. also adv.而且;还;此外

She has a reputation for brilliance. Also, she is gorgeous. 她以才华出众而闻名。此外，她还非常漂亮。

1. aurora [ɔ:-'rɔ:-rə] n. 晨曦；曙光；朝霞；北极光； 欧若拉
2. boreal ['bɔ:ri:l] adj. 北的；北方的；北方地区的；北风的
3. Auroral [ɔ:-'rɔ:-rəl] adj. 曙光的，极光的，玫瑰色的
4. Acoustics [əˈku:s-tɪks] adj.①（吉他等乐器）原声的，自然声的，不用电传音的。②声音的;听觉的。n.①（空间的）传声效果，音响效果。②声学。

...acoustic signals. 声音信号

1. folk tale 民间故事
2. have long held that 长期以来一直认为
3. Lithu-ania [ˌlɪ-θjʊ-'eɪ-nɪə] n. 立陶宛