1. 预防气候变化刻不容缓

*Climate change* is real. *Carbon dioxide*二氧化物 fromburning *fossil fuels* and clearing *forests*, among other human activities, is to blame责备. And more and more of that *global warming pollution*污染 is being dumped倾倒 in the atmosphere each year.

气候变化是事实。产生气候变化的罪魁祸首，是化石燃料的燃烧，以及树木的砍伐等人类活动。如今，排放到大气中的温室气体一年比一年多。

So says *the United Nations Intergovernmental政府间的 Panel专门小组* [地点状on *Climate Change's new synthesis综合 report* （released发布 on November 2）]. The synthesis reduces减少 thousands of pages of scientific knowledge to their essence本质. That essence, however, has hardly changed [since *the last synthesis report* in 2007].

联合国政府间气候变化专门委员会，于 11月2日发布的综合报告也是如此说。该报告省略了数千页描述气候变化本质的科学知识。自2007年的综合报告发布以来，这些被省略的部分就没有改变过。

{What has changed} is *the concentrations*浓度 of *greenhouse温室 gases* in the atmosphere, which have now touched 400 parts-per-million百万分之几. *Pollution* （in *the first decade* of the 21st century） grew twice [as fast as it did in *the last few decades* of the 20th century].

*The resulting作为结果的 global warming* poses造成问题risks （ranging变化from rising sea levels （that drown淹死 inhabited coasts海岸） to *crop产量 failures* from *stronger heat waves* and *drought*旱灾）.

改变的内容则是大气中温室气体的浓度，现已上升至百万分之400。21世纪头10年的污染速度和20世纪最后几十年的污染速度一样，增长了两倍。全球变暖势必会造成海平面上升，沿海居住区的淹没，以及热浪和干旱加剧导致的作物减产。

The IPCC has now offered提供 a budget预算 for how much pollution （people can add to the atmosphere without too much *climate change*）. Unfortunately, humanity has already used more than half of that budget.

日前，联合国政府间气候变化专门委员会，就人类可以向大气排放多少污染物而不至使气候变化太明显，发布了一个“预算”。遗憾的是，人类早已用尽过半“预算”。

The world's nations are meeting in Lima this year 目的状in *hopes* of hammering out a global deal （to combat *climate change*） 目的状to be agreed upond达成一致 in Paris in 2015. The new report is *a reminder* to world leaders （that *the stakes*利害关系, like the seas, are high）.

今年，世界各国领导人在利马召开会议，希望拟定一项应对气候变化的全球协议，并于2015年在巴黎商定。对于世界各国领导人来说，这份新报告是个提醒，当中的厉害关系就像大海一样深不可测。

1. di-oxide[daɪ-ˈɔk-saɪd] n.二氧化物
2. dump v.倾倒;倾卸
3. Inter-govern-mental adj. 政府间的
4. Panel n.（进行公开讨论或作决策的）专门小组
5. syn-the-sis [ˈsɪn-θə-sɪs] n.综合;结合;结合体。(通过化学或生物反应进行的)合成
6. release v.释放;放出。发表;公布
7. es-sence [ˈe-sns] n.实质;本质;精髓
8. concen-tration [ˌkɔn-sn-ˈtreɪ-ʃn] n.浓度。集中;汇集。全神贯注;专心;专注
9. green-house n.温室；暖房
10. greenhouse gases 温室气体（主要为二氧化碳）
11. parts-per-million百万分之一;百万分之几;百万分率
12. resulting adj. 作为结果的，因而发生的
13. pose v.产生（问题）；造成（威胁、危险等）
14. range from ... to ... 在从…到…的范围内变化

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

1. drown [draun] v.（把…）淹死，溺死
2. inhabited adj. 有人居住的
3. drought [draut] n. 干旱（时期），旱季；旱灾
4. offer v.提供（信息、建议等）；
5. budget [ˈbʌ-dʒɪt] n. 预算
6. hammer out （经长时间或艰难的讨论）达成（一致意见或协定）
7. agree upon就 ... 达成一致。对某事[物]有同样看法， 商定[同意]某事， 商定做某事

As soon as the details had been agreed upon, the results would be proclaimed. 一旦细节问题取得一致意见, 结果将予以公布。

1. stake [steɪk] n. (比赛或行动的)赌注，风险。利害关系;重大利益;(企业等中的)股本，股份
2. 过多过少睡眠都会使患病几率增加

Shakespeare莎士比亚 called sleep宾补*the chief主要的 nourisher滋养* in life's feast宴会. But today we know it's so much more. *Insufficient不足的 sleep* contributes to the risk of *cardiovascular心血管的 disease*, diabetes糖尿病 and obesity肥胖症. And now a study finds that *too little or too much sleep* are both associated with *a significant increase* in sick days *away from work*.

Almost 4,000 men and women （between 30 and 64 years old） participated in参加 the study, which followed them for seven years. The research revealed that *the absence*缺席 *from work* （due to由于 illness *increased dramatically显著地*） for those who said they slept less than six hours / or more than nine hours [per night].

*The sleep time* （that was associated with *the lowest number* of sick days） was *seven hours 38 minutes* for women / and *seven hours 46 minutes* for men. The study is in the journal Sleep.

Of course *these findings* are associative由关联产生的 / and not 表necessarily必然地 causal（adj.）存在因果联系的. Other factors may be 表responsible负有责任的 for the under-or oversleeping [to begin with首先，起初]. But *sleep patterns*模式 are still *a warning sign* for increased illness and health complications并发症.

Shakespeare put it best: Sleep…that knits up编织成*the ravell'd sleave*乱丝 of care.

莎翁称睡眠为生命筵席的主要营养。但现如今我们对睡眠则了解的更多。睡眠不足会引发心血管疾病、糖尿病及肥胖症病发风险。而现在一项研究发现，睡眠太多或太少都会显著增加我们患病请假的几率。

30至64岁年龄段的4000名男女参与了这项研究，研究人员追踪他们达7年之久。研究表明，那些称自己睡眠时间每晚少于6小时，或多于9小时的人们，因病误工的时间明显增加。研究还发现，因病请假天数最少的女性的睡眠时间，是每天7小时38分，男性则是7小时46分钟。这项研究已经在《睡眠》杂志上发表。

当然这些发现之间并没有联系，而且不存在因果必然关系。其他因素也可能导致睡眠不足或睡过头。但是睡眠模式仍然是导致疾病及引发健康病症的一个警告信号。

正如莎翁说的好:睡眠织起万千愁绪。

1. chief adj.主要的;最重要的

*Financial stress* is well established as *a chief reason* for divorce... 经济压力被确认是导致离婚的首要原因。

1. nou-rish [ˈnʌ-rɪʃ] v. 给…提供营养;滋养
2. feast [fi:st] n. 盛会；宴会
3. Insufficient [ˌɪnsə'fɪʃnt] adj.不充分的;不足的;缺乏的
4. cardio-vas-cular [ˌka:diəu-ˈvæs-kjə-lə(r)] adj. 心血管的
5. dia-betes [ˌdaɪə-ˈbi:ti:-z] n.糖尿病
6. obesity [əu'bi:-sətɪ] n. 肥胖，过胖；肥胖症
7. participate [pa:ˈtɪ-sɪpeɪt] v.

→you participate in an activity参与；参加

1. Someone's absence from a place n.不在；缺席
2. due to由于；因为；应归于；因…而产生，(作为结果)发生
3. dramatically[drə'mætɪklɪ] adj.

→A dramatic change or event突如其来的;急剧的;引人注目的

This policy has led to *a dramatic increase* in our prison populations. 这项政策已经让我们监狱的囚犯人数激增（显著的增加）。

→A dramatic action, event, 激动人心的;引人注目的;令人印象深刻的

He tipped his head to one side / and sighed dramatically. 他把头歪向一边，重重地（令人印象深刻地）叹了口气。

→戏剧的;有关戏剧的;戏剧学的

1. associative [əˈsəu-ʃiə-tɪv] adj.联想的；由关联产生的。关联式； 相联； 传递性

*The associative guilt* was ingrained in his soul... 由此产生的内疚感在他灵魂深处挥之不去。

1. necessarily adv. 必要地；必需地；必定地；必然地

you say that something is not necessarily the case, 一定地;必要地

1. causal [ˈkɔ:zl] adj. 具有因果关系的，构成原因的

Rawlins stresses that it is impossible to prove a causal link between the drug and the deaths... 罗林斯强调，无法证明这种药物和多起死亡事件之间存在因果关系。

1. someone or something is responsible（adj.） for a particular event or situation, 负有责任的;应承担责任的
2. to begin with首先，起初

You are wrong about the facts [to begin with]. 首先你把事实都没弄对。

It was fine [to begin with] / and then it started to rain. 起初天气很好, 后来才开始下雨。

1. knit [nɪt] v.编织；针织；机织

knit up织成，织完（某物）

1. sleave [sli:v] n. 细丝，乱丝。v. 解开，分成细丝
2. 快速冲刺能燃烧大量脂肪

Want to exercise, but don't have enough time? Forget slogging苦干 half an hour on the treadmill跑步机. You can burn *the same number of calories* with a few *quick sprints*全速短跑 on an *exercise bike*. So says a study presented展示 at *a meeting* of *the American Physiological Society*.

Researchers studied *10 active*有生气的 *young men*. For three days, the men ate an energy-balanced diet—meaning *calories in* matched使相配 *calories out*. Then, still on the diet, each guy spent two days living in a sealed密封的 chamber房间, so researchers could monitor监控oxygen and CO2 levels—*a way* of exactly calculating calories burned.

Just hanging out闲逛 watching TV, the guys burned 2,200 calories a day. But they burned 200 more on days when they did five *30-second sprints*冲刺on an exercise bike. Now, these were not laid-back悠闲的 efforts. The guys pedaled蹬踏板 as hard as they could, and had to take *four-minute rest breaks*小憩in between.

*Previous studies* show that *sprint training* like this improves *the body's response* to blood sugar, possibly helping to stave off延迟 diabetes糖尿病. And the researchers say {it may be *an alternative*（n.）可供替代的 to *endurance耐力 exercise* for burning calories}. That is, [if you don't mind really] feeling the burn.

想锻炼身体，却苦于没有足够的时间？别再提花半个小时在跑步机上跑步了。在健身自行车上快速冲刺也能燃烧掉同样多的热量。一项美国生理学会会议研究如此报道。

研究人员以10名充满活力的年轻男子为对象展开了实验。让他们摄取能量均衡的饮食，以保证摄入和输出相等的热量，并维持三天。之后让每个人在封闭的室内住两天，同时继续上述饮食方式。这样研究人员就能通过监测氧气和二氧化碳的水平，来计算消耗了多少热量。

就算他们整天躺着看电视，也要每天燃烧二千二百卡路里。有时让他们做30秒的自行车冲刺，则会多消耗两百卡路里热量。注意，这可不是闲散的运动。他们得尽全力踩踏板，中途还得休息四分钟。

以前的研究表明：像这样的冲刺训练能够改善身体的血糖循环，有预防糖尿病的可能性。研究人员还指出这也许是另一种燃烧脂肪的方式，可以替代持久的锻炼。如果你真的不介意燃烧的感觉，那么就去试试吧。

1. slog [slɔg] v.n. 困难而费力的工作(或任务)

→you slog through something, v.拼命干;努力苦干

She has slogged her way through ballet classes since the age of six... 从 6 岁开始，她就一直在努力地学习芭蕾。

→长途跋涉;步履艰难地行进

Why should Melissa have to slog around the supermarket on her own? 为什么梅利莎会一个人在超市里面费劲地转来转去？

1. tread-mill [ˈtred-mɪl] n. ①踏车；（锻炼身体的）跑步机。②单调的工作；枯燥(或繁重)的工作
2. sprint [sprɪnt] n. vi. 冲刺，全速短跑。
3. exercise bike [体]室内健身自行车
4. present v.呈现；展示；陈述

We presented three options to the unions for discussion... 我们向工会提供了3种选择供讨论。

1. sealed [si:ld] adj. 未知的，密封的
2. monitor v.监控;监视;监督
3. hang out v.①晾晒（洗好的衣物）。②（呆在某处，或与某人呆在一起）闲逛，逗留
4. laid-back adj.悠然自得的；放松随和的。懒散的；悠闲的
5. pedal v.蹬，骑（自行车）
6. in between adv. 在中间
7. stave off v.推迟;暂时避开
8. endu-rance [ɪnˈdjuə-rəns] n.耐力;忍耐力
9. 士兵为何患上战后心理创伤?

War is hell. And for many soldiers, the experience leaves lasting持久的 scars创伤. And not just physical ones. A subset子集 of veterans退伍军人 develop *post-traumatic创伤后的 stress disorder*失调, or PTSD. But it might not be *only the horrors* of battle that make them susceptible易受影响的. [According to a study in the journal *Psychological Science*] *echoes*回声 of *childhood abuse* may contribute.

Psychologists assessed评估 *the mental health* of hundreds of Danish soldiers before, during and eight months after they were shipped to Afghanistan. Turns out *the vast广大的 majority*, some 84 percent, were resilient能复原的, showing no *undue过度的 signs* of stress [at any time]. A small number, about 4 percent, developed PTSD, with *symptoms*症状 （that showed up显现出来 when the troops returned home）.

When the researchers compared those two groups, they discovered that *the cohort*一群人 with PTSD had not been exposed暴露于 to more battlefield trauma创伤—but they were more likely to have experienced *violence暴力 or abuse* in civilian平民 life, particularly as a child.

For the remaining剩余的 soldiers, being deployed部署 actually helped: something about *being part of the team* quelled平息 *the anxiety* they started out with. *That finding* suggests that PTSD is not uniform统一的, even for those （in uniform制服）. And that *one man's poison*毒药 may be *another man's cure*疗法，药物.

战争就是地狱。对于许多军人来说，战争的经历给他们留下了永远的创伤，并不仅仅是指身体上的创伤。根据一项发表在《心理科学杂志》上的题为“虐待儿童可能造成的影响”的研究，一小部分退伍军人患上了创伤后应激障碍，略作 PTSD，然而对战争的恐惧并不足以使他们患上这种心理疾病。

心理学家们评估了上百名丹麦士兵被派往阿富汗战场之前，期间以及八个月之后的心理健康水平。结果证明，大多数（大约84%）士兵的精神适应力强，在任何时候都没有迹象显示他们承受着过度的压力。在部队撤回后，一小部分士兵（大约4%）出现了创伤后应激障碍的症状。

当研究人员比较这两组士兵时，发现患上创伤后应激障碍的战士，并没有更多地接触到战地创伤，但是他们在平常生活中经历过暴力或者虐待的可能性更大，尤其是在儿童时期。

对于从战场上幸存的战士来说，听从指挥实际上有所帮助：这种成为团队一员的归属感平息了一开始就有的焦虑心态。这个发现证明：即使对那些身穿制服的士兵，创伤后应激障碍也并不完全一样。这就所谓的我之毒药，彼之良药。

1. scar [ska:(r)] n.疤;伤疤;伤痕；精神上的创伤
2. subset [ˈsʌbset] n.小组;分组;子集（*A subset* of a group of things）
3. vete-ran [ˈvetə-rən] n.退伍军人;老兵;老战士
4. post-traumatic ['pəust-trɔ:-m'ætɪk] 创伤后的
5. trau-matic [trɔ:ˈmætɪk] adj.造成创伤的;惊骇的;痛苦的

I suffered *a nervous breakdown*. It was a traumatic experience... 我曾经神经崩溃过。那是一次痛苦的经历。

1. disorder [dɪs-ˈɔ:də(r)] n. ①(身心机能的)失调，不适，紊乱，疾病。②杂乱;混乱;凌乱

He appeared to be suffering from *a severe mental disorder* / and had served *a term* in prison. 他看上去患有严重的精神疾病，而且坐过牢。

*The emergency*紧急的 *room* was in disorder... 急诊室里一片混乱。

1. post-traumatic stress disorder创伤后应激障碍（ PTSD）
2. echo n. 回声，共鸣；（言语、作风、思想等的）重复
3. vast adj.巨大的;广大的;广阔的

the vast majority绝大多数

1. resi-lient [rɪ-ˈzɪ-liənt] adj.①坚韧的;有弹性的;有韧性的;有回弹力的。②能复原的;恢复快的;适应力强的
2. undue [ˌʌnˈdju:] adj.过分的；过多的；过度的
3. show up v. (使)清晰;(使)变得明显;(使)显现出来
4. co-hort [ˈkəu-hɔ:t] n. (尤指为了进行统计而被看作一个整体的)一群人（A cohort of people）

Tests were carried out by teachers on *the entire cohort* of eight to nine year-olds in their third year at primary school... 测试是由老师在小学三年级所有八岁到九岁的学生中进行的。

1. someone is exposed to something dangerous or unpleasant, v.使暴露于（险境）;使遭受（危险或不快）

→someone is exposed to an idea or feeling, usually a new one, 使受…的影响(或熏陶);使接触

1. civilian [səˈvɪ-liən] n. adj.平民（的）;老百姓
2. deploy v.部署，调集（部队或军事力量）;展开； 配置

The president said he had no intention of deploying ground troops. 总统称并不打算部署地面部队。

1. quell [kwel] v.①压制;消除;镇压;平息。②消除，祛除(害怕、愤怒等)

Troops eventually quelled the unrest. 军队最终平息了动乱。

1. uniform adj.①（同一物）始终如一的，均匀的，划一的。②（不同物）全都相同的，一律的，清一色的

Chips should be cut into *uniform size* and *thickness*... 土豆条要切得大小厚薄均匀。

Along *each wall* stretched uniform green metal filing cabinets... 每面墙边都一溜摆着相同的绿色金属档案柜。

The natives uniformly agreed on this important point. 当地人在这一要点上达成了共识。

1. 有创意的人更善于圆谎

“Lots of us are able to cheat a little bit有点 and still think of ourselves as honest people.”

Dan Ariely is a professor of *behavior economics* at Duke University. His *latest book*, *The Honest*正直的 *Truth* About Dishonesty欺诈, explains how *creativity* makes us *better liars*说谎者—even to ourselves.

“Dishonesty不诚实 is all about *the small acts* we can take and then think, no, this not real cheating. So if you think that *the main mechanism*行为方式 is rationalization（n.）合理化, then 主{what you come up with想出}, and {that's what we find}, 系is that （we're basically总的说来 trying to balance feeling *good* about ourselves）. On the one hand we get some satisfaction, some utility（n.）效用 from thinking of ourselves as honest, moral, wonderful people. On the other hand we try to benefit受益 from cheating.

“So rationalization合理化is {what we allows you to live with some cheating / and not pay a cost in terms of根据 your *own view* of yourself}.

“What kind of people would be able to rationalize使合理化 better than other people? Better storytellers, right? Creative people, right? Because if you're creative, you find more ways to cheat / and still使平静下来 yourself 双宾a story （about why this is okay）.”

"许多人或多或少会欺骗别人，但仍自认为是个诚实的人。"

丹艾瑞里是杜克大学行为经济学的教授。他最近出版的书籍《The Honest Truth About Dishonesty》解释了为何创造力使人们更善于撒谎，甚至是更好地自欺欺人。

“不诚实都是善意的小举动，对，这不是真正的欺骗。所以如果你认为合理化才是主要的机制，那么你得平衡自己的说法和别人发现的事实，以达到自我感觉良好的目的。一方面人们倾向于认为自己很诚实、有道德、很了不起，从这样的想法中能获得满足感。另一方面我们试图从欺骗中获益。”

“那么合理化就是即允许你欺骗别人，但却丝毫不影响自己对自己的看法。”

“哪一类人能够比别人更好地将谎言合理化？更会讲故事的人，对吗？富有创意的人，对吗？因为如果你有创意，那么你会想到更多欺骗的方式，只要你能圆谎就行。”

1. a little bit有点;有几分。

I am *a little bit* *busy* right now ,can we talk later？我现在有点忙,能等一下再说吗 ？

1. Dis-honesty [dɪs-'ɔnɪ-sti:] n.不诚实;欺诈
2. mechanism [ˈme-kənɪ-zəm] n. (人为生存、对付困境的)机制，行为方式

...a *survival mechanism*, a means of coping with intolerable stress. 一种生存机制，一种应对无法承受的压力的方法

1. rationa-lization [ˌræʃ-nə-laɪ-'zeɪʃn] n.合理化，合于经济原则。

→v.使…合理化;对…进行理性解释。

I poured my thoughts out on paper 目的状in an attempt to rationalize my feelings. 我把自己的想法一股脑地写在纸上，以试图给自己的感受找个说辞。

→（v.）a company, system, or industry is rationalized, 精简;（通常指通过削减员工和设备）使更有效率

...*the rationalization* of the textile industry. （n.）纺织行业的精简

1. you come up with a plan or idea, 想出，提出(计划、想法等)

Let's fingerprint the canoe, see if we come up with anything. 让我们提取一下独木舟上的指纹，看看能不能有什么发现。

you come up with a sum of money, 设法拿出(所需钱款)

1. utility [ju:ˈtɪ-ləti] n.功用;效用;实用
2. in terms of

→就…而言, 从…方面说来

He referred to提及 your work in terms of high praise. 他对你的工作大加赞扬。

He thought of everything in terms of money. 他是从钱的角度来看每一件事。

→用…的话，用…字眼，以…的措辞；从…角度来讲

→根据，依据

→以…为单位；换算，折合

1. still v. (使)安静；(使)无声

*Her crying* slowly stilled... 她的哭声慢慢静了下来。

1. 相比过去未来更接近现在吗?

When people talk about the past, they tend to lean使倾斜 slightly back. And [if folks talk about *things* to come] they tend to lean forward. Various studies have revealed *those physical attitudes*. Now a study finds that people usually experience time as if we are literally确实地 moving toward the future / and away from the past.

[Through通过 surveys调查] researchers first determined确定 {that subjects perceive *future events* as being closer than past events, even if *the events* are equidistant等距的}. Then the scientists had *subjects* experience *a virtual reality*虚拟现实 where they were either walking towards a fountain喷泉 or backwards away from it. And as they walked, the subjects had to estimate the distance of a specific特定的 date日期. The date they were given was either three weeks ago or three weeks in the future. The participants （backing away from the fountain） perceived the dates as being equidistant from the present. But those （walking towards the fountain） estimated *the future date* 宾补to be closer than *the past date*.

The researchers interpret解释 the finding 宾补to mean that *the future* feels closer because it seems like we’re literally确实地 moving towards it. Gives *new meaning* to the phrase, “Looking forward to seeing you.”

当人们谈到过去的事情时，身体总是会稍微后仰。当人们谈起即将发生的事情时，身体往往会向前倾。虽然各式各样的研究已经揭示了身体姿势的秘密，但有项研究发现，人们对时间的体验往往是这样的：仿佛我们真的在不断地走向未来，远离过去。

通过调查，研究人员首次确认了在受试者的意识里，未来的事件比过去的事件更接近一些，即使这些事件在时间上是等距的。其后，科学家让受试者去感受虚拟的现实，即让他们朝喷泉的方向前进，或者朝远离它的方向倒退。同时让受试者估计某个特定时间所代表的距离。给受试者的日期，或者是三星期前，或者是三星期后。远离喷泉后退的参与者感知的日期，与现在是等距的。然而朝喷泉前进的受试者估计的未来的日期，更接近于现在。

研究人员解释道，这项研究说明未来给人的感觉更近，因为我们似乎确实在向未来前进。这给短语“Looking forward to seeing you（期望与你再见面）”赋予了新的含义。

1. lean[li:n] v.（身体）倾斜，倾侧

→you lean on or against someone or something, v.（使）倚；（使）靠

1. literally [ˈlɪtə-rəli] adv.确实地；真正地；不加夸张地
2. as if 好像，似乎，仿佛
3. determine v. ①确定;查明。②下决心;决意;决定
4. equi-distant [ˌi:kwɪ-ˈdɪs-tənt] adj. 距离相等的，等距的
5. virtual reality虚拟现实
6. fountain [ˈfaun-tən] n.①喷泉;喷水池。②源泉;根源;来源
7. inter-pret [ɪnˈtɜ:prɪt] v.①解释;说明;阐释。②口译
8. 困惑帮助人们学习

When we're confused困惑 by something—say with *a movie plot*情节 or *calculus*—we tend to feel uncomfortable, frustrated挫败的. But maybe we should embrace拥抱 the confusion. Because a new study finds that confusion can lead to better learning.

Scientists set up *a situation* where they purposely故意地 confused subjects during *a pretend假装的 learning session学期*.

The subjects watched *an animated有生气的 tutor助教* / and student discuss *possible flaws瑕疵* in a scientific study. The researchers had *the animated tutor* and *student* disagree with有分歧 each other on specific flaws. But 目的状to set up *a really confusing situation* for one group of subjects / they also had *the pretend tutor* and *student* make incorrect or contradictory互相矛盾的 statements about the study. Then *the subjects* had to decide *which of the two opinions* had more scientific科学的 merit优点，价值.

Subjects （who were forced被迫的 to deal with *the incorrect and contradictory互相矛盾的 statements*） did significantly值得注目地 better on later tests where they had to spot发现 flaws in studies, as opposed to而不是 *those subjects* who only faced the disagreements分歧 between *the animated tutor* and *student*. The study will be published in the journal *Learning and Instruction*教诲.

Researchers note that confusion motivates激励 us to work harder to understand, and so we gain *a deeper and more comprehensive*广泛的 *knowledge* of a subject.

当我们对某些事物，例如某个电影的情节或者微积分感到困惑时，往往让人们觉得不舒服，沮丧。也许我们应该迎接困惑。因为一项新的研究发现困惑能引导人们更好地学习。

科学家们设定了一个情景——故意让受试者对假设的课程产生困惑。

让受试者观看一场生动的、在老师和学生之间展开的生动的讨论，讨论主题为一项科学研究的缺陷。研究人员让老师和学生就某个具体的缺陷产生意见分歧。但为了让其中一组受试者真正感到困惑，研究人员还得让老师和学生对研究进行错误的或者自相矛盾的陈述。然后由受试者决定哪一方的观点更具有科学价值。

其中一组受试者只需要面对老师和学生的意见分歧，与之相反，另一组还需要面对错误、矛盾的陈述，很明显在后续试验中指出研究里错误的地方时，后者比前者表现得更好。这项研究将会发表在《学习与教学》杂志上。

研究人员指出困惑能激发人们的斗志，让他们为了弄明白某事物而努力学习，这样人们才能对一门学科有更深刻，更全面的认识。

1. frustrate [frʌˈstreɪt] v.①使灰心;使沮丧;使愤怒。②挫败;阻挠…的成功
2. embrace [ɪmˈbreɪs] v.拥抱
3. session n. (某项活动的)一段时间，一场，一节

A session of a particular activity

1. animated [ˈænɪ-meɪ-tɪd] adj.生气勃勃的；活泼的；热烈的
2. tutor [ˈtju:tə(r)] n. 家庭教师；导师；（大专院校的）助教；课本
3. flaw [flɔ:] n. ①瑕疵，缺点；②（性格中的）缺点，弱点。③错误;谬误
4. you disagree with someone / or disagree with what they say, 不同意;有分歧;意见不合
5. contra-dictory [ˌkɔn-trə-ˈdɪk-təri] adj.互相矛盾的;相互对立的
6. merit [ˈme-rɪt] n.①优点;长处;优势。②良好品质;价值

This method at least had *the merit* of simplicity（n.）简单. 这种办法至少有简单明了的优点。

The argument seemed to have *considerable merit*... 这个论点似乎颇有价值。

1. someone forces you to do something, 强迫;强制
2. spotv.看到;发现;认出
3. as opposed to而不是

We ate in the restaurant, as opposed to the bistro. 我们是在餐厅吃的饭，而不是在小饭馆。

→you are opposed（adj.） to something, 反对的；不赞成的

1. motivate [ˈməutɪ-veɪt] v.① (尤指情绪)激发，激励，驱使。②使决心做;使决意做

They are motivated by a need to achieve... 对成功的渴望激励着他们。

How do you motivate people to work hard and efficiently?... 你是怎样激励大家奋发高效地工作的？

1. compre-hensive [ˌkɔm-prɪ-ˈhensɪv] adj.综合性的;全面的

*The Rough Guide* to Nepal is *a comprehensive guide* to the region. 《尼泊尔概况》是一本全面介绍该地区的旅游指南。

1. 气味泄露情绪的秘密

Pheromones信息素: they're those *chemical signals* often associated with attraction吸引力. But there are many chemical signals （we give off散发出）—including ones （that might signal发信号 alarm, aggression侵略 or other emotions）.

For example, take fear. If sweat contains compounds混合物 associated with fear, could someone （smelling the sweat of a frightened person themselves） wind up最终落得 experiencing fear?

To find out, researchers had *male subjects* watch two movies. One was scary吓人的, and the other made viewers feel disgusted厌恶的. The researchers then collected the participants' sweat. Female女性的 subjects then smelled the sweat, 与…同时while the scientists recorded their facial面部的 expressions. And the women who smelled “fear sweat” actually produced fearful害怕的 facial expressions. While those who smelled the “disgust sweat” made disgusted faces. The inference is that the chemical compounds impelled the female subjects to remotely experience the same emotions felt by the sweaty males. The study is in the journal Psychological Science.

So despite our lack of *conscious（adj.）有意识的 awareness（n.）察觉* of interpersonal人际的 chemical communication, it seems that we nevertheless（adv.）仍然 do *physically身体上地 and psychologically心理上地 process* such chemical signals. The researchers note that this study provides evidence that communication is not limited to language and visual cues（n.）暗示: even we *rational理性的 humans* can become “emotionally synchronized使同步” via经由 scent人的气味.

信息素是一种化学信号，常与吸引力有关。我们散发出的化学信号有许多种，包括那些传递警觉，攻击或者其他情绪的化学信号。

用恐惧来作例子。如果汗水里包含与恐惧有关的化合物，那么当一个人闻到另一个感到恐惧的人身上散发出的汗味，他会最终感受到恐惧吗？

为了找到答案，研究人员让男性受试者观看了两部电影。一部电影是恐怖片，另一部则让观众觉得恶心。研究人员收集了受试者的汗液，然后让女性受试者闻收集到的汗液，并会记录下她们的面部表情。闻到“害怕的汗”时，女性们脸上真的会出现恐惧的神情。那些闻到“恶心的汗”的女性则会做出恶心的表情。因此研究人员推断，化学信号会驱使女性受试者远程体验与流汗者同样的情绪。这项研究发表在《心理科学》杂志上。

尽管我们并没有意识到人际间存在化学信号交流，但不管怎样，我们的生理和心理均在处理这种化学信号。研究人员指出，这项研究为交流并不局限于语言和眼神提供了证据：即使我们是有理性的人类，但我们的情绪仍会被气味“同化”。

1. Phero-mone [ˈferə-məun] n. 信息素（生物体释放的化学物质、能影响其他同类生物的行为）；外激素
2. give off / out 释放，放出，发出（气体、热量、气味等）
3. signal v. ①(用手势、声音等)发信号，发暗号，示意。②预示;表明;显示
4. compound n. ①(化学中的)化合物，②混合物;组合物
5. wind up 最终沦落到；最终落得；(以…)告终

Both partners of the marriage wound up unhappy. 最后婚姻双方都不幸福。

1. aware-ness [əˈweə-nəs] n. 察觉，觉悟，意识

There has been *an increasing awareness* that many people are affected by crime. 人们越来越清楚地认识到很多人受到犯罪活动的影响。

1. never-the-less [ˌnevə-ðə-ˈles] adv. 然而；尽管如此；不过；仍然
2. cue [kju:] n. 暗示;提示;信号，线索。v.给(演员)暗示(或提示);为…提示

He read the scene, with Seaton cueing him. 在西顿的提示下，他念了这一场的台词。

1. rational [ˈræʃnəl] adj. 神智清楚的；理性的；理智的；合理的
2. syn-chronized ['sɪŋ-krə-naɪzd] v. (使)同步;(使)在时间上一致;(使)同速进行

It was virtually（adv.）实际上 impossible to synchronise our lives so as to take holidays and weekends together... 想让我们的生活步调保持一致好一起去度假和过周末，几乎是不可能的事。

...a series of unexpected, synchronized attacks. 一连串同时发生的意外攻击

1. via [ˈvaɪə] prep. 经过；通过，凭借；取道

The executive's meeting had finished / and Sir Marcus had reported its conclusions to the prime minister via Richard Ryder. 领导层会议已经结束，马库斯爵士已通过理查德·赖德把会议结论报告给了首相。

1. 苦味也许能战胜哮喘

People （with asthma哮喘, *chronic疾病慢性的 obstructive故意阻碍的 pulmonary肺的 disease* and other *breathing disorders（n.）失调*） need fast relief（n.）缓解 when their airways tighten up收紧. Unfortunately, *the most commonly（adv.）通常地used medication* has obnoxious令人讨厌的 *side effects*副作用. But scientists recently discovered that *a bitter苦的 taste* can be *a more effective treatment*疗法 ——and now they know why. The work is published in PLoS Biology生物学.

When *an asthma哮喘 attack* hits一击, the airway肺的气道 shrinks收缩 and makes breathing difficult. To keep air flowing流动, the sufferer患者 must take medication to relax the passage's muscles / and open it back up. But a couple years ago, researchers discovered *airways* contain含有 *bitter taste receptors感受器* like the ones on the tongue舌头. After exposure（n.） to暴露接触 bitter substances物质, *the receptors* can expand使…扩张 *the airway* more quickly and more effectively than *the most commonly used treatment*.

Researchers examined *airway tissue*动植物的组织 to learn why bitterness苦味 makes the muscles relax. During an asthma哮喘 attack, calcium（n.）钙flows into the cells of the airway / and contributes to muscle contraction（n.）收缩. But *bitter substances* block阻止 the channels that allow calcium钙into cells, which relaxes *the tightened tissue*. And that's *the opposite对立物* of a bitter pill药丸.

患有哮喘、慢性阻碍性肺病，以及其它呼吸不畅的病人，需要迅速缓和收缩的气道。不幸的是，最常用的药物有着令人讨厌的副作用。不过，近来科学家发现苦味是治疗效果更好的药物。现在科学家们也发现了其中的原因。这项研究发表在《公共科学图书馆·生物学》上。

当哮喘发作时，气道萎缩，导致呼吸困难。为了保证呼吸，患者需要服用药物来舒缓气道上的肌肉，使之重新舒张。然而几年前，研究人员发现气道里包括跟舌头一样可以感受苦味的感受器。苦味感受器接触到苦味物质之后，能够迅速地扩张气道，且比最常用的药物更快，更有效。

研究人员检查气道组织后，了解了为什么苦味能够让肌肉放松。原来哮喘发作时，钙流进气道细胞，于是导致肌肉收缩。但是苦味物质能够阻碍钙流入气道细胞，所以就能缓解拉紧的组织。这就是良药苦口利于病。

1. asthma[ˈæsmə] n. <医>气喘，哮喘
2. chronic [ˈkrɔnɪk] adj. ①(疾病、残疾)慢性的，长期的。②难以根除的;积习难改的
3. obstructive [əbˈstrʌktɪv] adj.故意刁难的；蓄意阻挠的
4. pulmo-nary [ˈpʌl-mə-nəri] adj.肺的；肺部的
5. disorder n. ①(身心机能的)失调，不适，紊乱，疾病。②杂乱;混乱;凌乱
6. tighten [ˈtaɪtn] v.收紧；（使）变紧；（使）绷紧，拧紧

tighten up v. 使紧密，加强；收紧。v加紧工作;加强管理;严格要求

1. ob-noxious [əb-ˈnɔk-ʃəs] adj.令人讨厌的；使人反感的；可憎的
2. side effect n. （药物等起到的）副作用
3. shrink [ʃrɪŋk] v.收缩，皱缩；（使）缩水；退缩，畏缩

All my jumpers have shrunk. 我所有的套头毛衣都缩水了。

*The vast forests* of West Africa have shrunk.. 西非的大片森林面积已缩小了。

→you shrink away from someone or something, (因害怕、震惊或厌恶)退缩，畏缩，避开

→you do not shrink from a task or duty, 畏避，回避(工作、责任等)

1. back up倒行；退着走；后退，倒车

She backed up a few steps. 她后退了几步。

1. a couple of 两三个;几个
2. receptor [rɪˈseptə(r)] n.（人体的）感受器，受体
3. Exposure（n.） to something dangerous 暴露;接触
4. cal-cium [ˈkæl-siəm] n.钙
5. con-traction [kən-ˈtrækʃn] n. ①(分娩时的)子宫收缩，宫缩。②(词的)缩写形式。③（开支等）缩减

*the expansion扩张 and contraction*收缩of the metal 金属的膨胀与收缩

1. The opposite（n.） of someone or something对立物；对立面
2. 学龄前儿童户外运动偏少

It's springtime, and that means mud pies, bug bites and scraped擦伤 knees—if you're a preschooler学龄前儿童. Or at least it used to.

*Health experts* say young children should get at least *an hour* of physical activity a day. And studies have linked more time outside with motor运动神经 development, improved *mental精神的 health*, *better behavior* and, of course, more sun-supplied *vitamin D*.

But *a new study* of nearly 9,000 U.S. children found that *almost half of preschool-age kids* are not getting outside at least once a day with their parents.

Girls were even less likely to be taken outside than boys, and some families reported not taking *their young children* outside more than a few times a month. The findings are in Archives档案 of Pediatric小儿科的 & Adolescent青春期的 Medicine.

*Kids* who had daycare托儿所 were slightly less likely to get the time outside with a parent. They were also unlikely to get *the recommended被推荐的 minimum最低限度的 one-hour* of physical activity while at daycare. So researchers recommended建议 checking in [with *care providers*] about time outside. *One hour* out of 24 isn't *too much to ask*过分的要求, right?

时值春天，而春天对学前小朋友来说则意味着泥馅饼，蚊虫叮咬和擦伤膝盖。或者说至少曾经是。

健康专家建议孩子们每天至少花一个小时来做体力运动。且研究显示户外活动时间越长，越有利于运动发育、促进心理健康，改善行为，当然也有助于接受日晒，产生更多维生素D。

但一项新的研究在调查了近9千名美国儿童后，发现几乎有一半的学龄前儿童，并没有每天被父母带出去玩。

女孩们被带出去玩的时间比男孩们更少，且有些家庭称带孩子出去玩的时间一个月只有几次。这项发现发表在《儿科学与青少年疾病文献集》上。

那些托儿所的孩子们同家长一起出去玩的可能性更少。托儿所也不太可能建议孩子们每天至少花一个小时去户外活动。因此研究人员建议与保健人员确认孩子户外活动时间。一天24小时，花一小时去运动不是过分的要求，对吗？

1. Archive [ˈɑ:kaɪv] n.档案;史料;记录;档案馆
2. Pediatric [ˌpi:dɪ-'ætrɪk] adj. 小儿科的
3. Ado-lescent [ˌædə-ˈle-snt] adj.青少年的;青春期的。n. 少年，少女
4. day-care ['deɪ-keə] n. 日托，幼儿园
5. re-commended [rekə-'men-dɪd] adj. 被推荐的
6. re-commend v.①推荐;介绍。②建议;劝说（做…)
7. check in ①(在旅馆)登记入住;(在门诊部)挂号。②(在机场)办理登机手续，检票登机

I'll ring the hotel. I'll tell them we'll check in tomorrow... 我来给旅馆打电话，通知他们我们明天入住。

He had checked in at *Amsterdam's Schiphol airport* for a flight to Manchester. 他已经在阿姆斯特丹的斯希普霍尔机场办好了登机手续，准备飞往曼彻斯特。

1. too much to ask 过分的要求
2. 睡眠有助于记忆

Want to remember something? Sleep on it先睡一晚上.

A recent study finds that *the more* we value重视 a piece of information *the more* likely we'll review回顾 it during our sleep. And because we do that, we'll tend to remember it.

Participants were shown objects with *different corresponding对应的dollar amounts* [on a computer screen]. If participants could remember that object [later on a test], they were rewarded with the associated有关联的 dollar amount. Objects were also accompanied伴随 by an associated sound, *for instance* a cat was accompanied by a “meow猫叫声.”

[After either a 90-minute nap打盹 or wake period] *subjects' memory* for low-value objects was worse than for high-value objects.

[In a second experiment] *associated sounds* were played either when the subjects were awake or asleep, 作为as *a way* to trigger引发 the memory of the object.

Researchers found that *low-value objects* were better remembered when *the associated sound* was played during subjects' sleep as opposed to而不是when they were awake.

The authors believe that during sleep is when we tend to go over重温 the day's new information, so / that is why they could manipulate操纵 *the memory storage* of lower-value objects during sleep time rather than wake time.

Gives *new meaning* to *the term*术语 （sound asleep）.

想记住某些事情吗？睡一觉再想吧。

一项最近的研究发现，人们越重视某条信息，就越有可能在睡觉时回顾这条信息。因为如此，所以我们往往会有它的记忆。

研究人员通过电脑屏幕向参与者展示金额不等的相应物体。如果参与者能够在稍后的测试中记住物体，那么就能获得相关金额的奖励。这些物体出现时，也会伴有相关的声音，例如一只猫会伴有一声猫叫。

不论是小睡90分钟或者醒着，受试者对低价值物品的记忆，要差于对高价值物品的记忆。

第二次实验中，为了触发对物体的记忆，研究人员在受试者睡着或清醒时，播放相关的声音。

研究人员发现，当受试者睡着时播放相关声音，他们对于低价值物品的记忆要好一些。

研究人员认为，正是在睡觉时间，人们往往会回顾当天接收的新信息，这就是为什么人们能够在睡觉时更好地掌控对低价值物品的记忆存储。

这又赋予“sound asleep（熟睡）”一个新的含义。

1. sleep on it v. 考虑一晚上；把问题留在第二天解决

I can't decide what to do. I'll sleep on it and let you know tomorrow. 我不能决定该怎么做. 我考虑一下,明天告诉你.

1. corre-sponding [ˌkɒrə-ˈspɒndɪŋ] adj. 相当的，对应的

→（v.）one thing corresponds to another, 相类似;相关;相对应

*The two maps* of London correspond closely... 这两张伦敦地图很相似。

*A 22 per cent increase* in car travel corresponds with *a 19 per cent drop* in cycle mileage per person... 乘车出行者的比率上升了22%，与之相对应，人均骑自行车的行驶里程下降了19%。

*March and April sales* （this year） were up *8 per cent* [on *the corresponding period* in 1992]. 与1992年同期相比，今年3月和4月的销售额增长了8%。

→（v.）you correspond with someone, (与…)通信

1. trigger [ˈtrɪgə(r)] n. （枪）扳机；起动装置。vt. 引发，触发；扣…的扳机
2. as opposed to 而不是，与⋯⋯相对

We ate in the restaurant, as opposed to the bistro. 我们是在餐厅吃的饭，而不是在小饭馆。

1. go over 重温，仔细检查；认真讨论；用心思考
2. mani-pulate [məˈnɪ-pju-leɪt] v.摆布，操纵，控制(他人，事件或局势)

He is a very difficult character. He manipulates people... 他是个极难对付的角色，总是把人玩弄于股掌之间。

...*accusations* of political manipulation. 对政治操纵的指控

1. storage n. 贮存；贮藏；储藏处，仓库
2. 真菌有恋足癖吗?

Do fungi真菌 have a foot fetish恋物癖? When researchers mapped绘制…的地图 the fungal species物种 （living on *the surface* of the human body）, they found *the skin* on the feet harbors the most diverse多种多样的 fungal真菌 community社会团体. The work is in the journal Nature.

Our skins play host to接待贵客 a huge variety多样性 of microbes, but previous studies focused on bacteria细菌. To expand扩展 that, researchers took *skin scrapings*刮屑 from 10 healthy adult volunteers. They collected these samples from 14 different sites on the body, including the scalp头皮, around the ears耳朵 and nose, along the limbs四肢, and three sites on the feet.

In most of these locations, a single genus（动植物的）属 of fungi called Malassezia dominated在…中占首要地位. But several different genera（动植物的）属 thrived兴隆 on the feet. Perhaps because feet come into direct contact with接触 the environment often, spend *part of their time* inside *warm, moist潮湿的 shoes* / and don't get washed洗涤 nearly as much as hands.

Fungal diversity（n.）多样化 did not correspond符合一致 with bacterial diversity多样性. Clearly显然地, different microbes prefer different types of skin. Understanding了解 these preferences喜好 could help treat *skin diseases*, leaving *our hides*人的皮肤 footloose自由自在的 and infection（n.）传染-free免…的.

真菌有恋足癖吗？当研究人员绘制出寄宿在人体表面的真菌物种图时，发现脚部皮肤上寄居的真菌群最具多样化。这项研究发表在《自然》期刊上。

人类的皮肤招待着种类奇多的微生物，但之前的研究重点在于细菌。为了解释这一点，研究人员收集了10位健康成年人的皮肤碎屑。他们收集的碎屑来自于14个不同的身体部位，包括头皮，耳朵和鼻子，四肢还有脚上的三处部位。

有一种叫做马拉色氏霉菌的单种属真菌，几乎占据了所有这些区域。但是在脚部却繁衍着其他种类的一些细菌。也许这是因为脚部经常与环境直接接触，总是躲在潮湿、温暖的鞋子里，且并不像洗手那样经常冲洗的缘故。

真菌的多样性与细菌的多样性并不一致。很明显，不同的微生物喜爱不同位置的皮肤。了解微生物的这些偏好，有助于治疗皮肤性疾病，让我们的皮肤自由自在，免受感染之苦。

1. fungi [ˈfʌŋ-gi:] n. (fungus [ˈfʌŋ-gəs]的复数)真菌
2. fetish [ˈfe-tɪʃ] n.① (能引起性快感的)恋物癖，恋物。②迷恋;痴迷
3. diverse [daɪ-ˈvɜ:s] adj.形形色色的;各式各样的
4. a person or country plays host to an event or an important visitor, 主办（活动）;接待（贵客）

→host v. 当主人，款待，做东；主办宴会，主持节目

1. scrapings [sk'reɪ-pɪŋz] n. 被刮削下的碎屑；刮( scraping的名词复数 )；擦；挖；刮擦声
2. scalp [skælp] n.头皮。战利品;对…的惩罚。v.剥下…的头皮。倒卖，炒卖(票)

Stock speculators wanted his scalp... 股票投机商想整他一顿。

He was trying to pick up some cash 方式状scalping tickets. 他那时正想通过倒票赚点儿钱。

1. limb [lɪm] n.①肢；臂；腿。②树枝
2. genus [ˈdʒi:nəs] n. （动植物的）属；类；种；型（复数写作genera）
3. dominate [ˈdɒmɪ-neɪt] v.①在…中占首要地位，在…中最具影响力。②控制;统治;支配。③俯视;高耸于

No single factor appears to dominate. 没有一个因素看似是决定性的。

1. you come into contact with someone or something, 接触;遇见

Doctors （I came into contact with） voiced their concern... 我接触到的医生，都表示了他们的担心。

1. If someone or something comes into a situation, they have a role in it. 在…中起作用

It's an unrestricted journey, and rules of any sort don't come into it. 这是一次没有任何限制的旅行，所有的规则都不起作用。

1. foot-loose[ˈfʊt-lu:s] adj. 未婚的；独身的；自由自在；无拘无束
2. hide n.<口>人的皮肤。兽皮;毛皮
3. duty-free; interest-free; tax-free; 免(税)的
4. 钱的价值取决于挣钱方式

Is every dollar bill钞票 worth the same? Or does a dollar （earned honestly） have a different value than a dollar with a sketchy粗略的 history?

In fact, a new study finds that people think of money （made from *questionable可疑的 activity*） as having less value than profits收益 （made [above board光明正大]）. And they're less likely to want the tainted被污染 money. The study is in the journal Social Psychological and Personality Science.

Subjects were divided into two groups. All subjects got the chance to fill out and enter up记下 to *70 raffle抽奖 tickets* to win $50. But *one group* was told that *the retailer*零售商 *Target*某公司名 provided the prize. While *the other group* heard the money came from Walmart—and that Walmart had been accused of poor labor practices. The subjects in the “Walmart” group entered significantly fewer tickets than those in the “Target” group.

The participants were then asked to estimate *how many grocery食品杂货店 items* they could buy with their newly won money. And the Walmart group consistently始终地 estimated that their $50 would purchase less than the estimates （coming out of the Target group）. They thought of the Walmart $50 as having less value than the Target $50. Seems a penny （saved） could be somewhat more or less than a penny （earned）.

每一块钱都具有一样的价值吗？靠正当劳动挣取的一美元与有不光彩历史的一美元价值不同吗？

事实上，一项新的研究发现：人们普遍认为靠非法活动赚取的钱比辛苦劳动换来的价值要小。人们不太愿意要不太干净的钱。这项研究发表在《社会心理与人格科学》上。

研究中受试者被分为两组。所有的受试者都有机会填写，输入70张彩票并赢得50美元。其中一组被告知奖金是由零售商塔吉特公司赞助，而另一在组则被告知奖金来自于沃尔玛，沃尔玛之前曾被指控压榨员工。“沃尔玛”组的成员输入的彩票明显比“塔吉特”组要少。

然后让受试者估计自己能用新赢来的钱买多少东西。“沃尔玛”组成员对50美元所能买到的东西的预测，要少于“塔吉特”组。他们认为来自沃尔玛的50美元的价值要少于塔吉特公司。似乎节省一个便士正好等于挣了一个便士。

1. sketchy[ˈske-tʃi] adj. (信息)粗略的，大概的，不完全的，不充分的

Details of what actually happened are still sketchy... 对于已发生事实的详细情况知道的仍然有限。

1. questionable [ˈkwes-tʃə-nəbl] adj.可疑的;不可靠的;有问题的;不确定的
2. above board 摆到桌面上的, 光明正大
3. taint [teɪnt] v.①玷污，毁坏，损害，败坏(地位、名誉)。②污染，毁坏(食品、药品)

...tainted evidence. 有瑕疵的证据

1. enter up记下

You must enter up the money （you spent） in the account book. 你必须把你花的钱记在帐上.

→To enter information into a computer or database（向计算机或数据库中）输入，写入

1. raffle [ˈræfl] n. v.抽奖;抽彩
2. retailer [ˈri:teɪ-lə(r)] n.零售商;零售店
3. grocery [ˈgrəʊ-səri] n. 食品杂货店；食品杂货业
4. consis-tently [kən'sɪs-tən-tlɪ] adv. (行为、态度等)一贯地，坚持地，固守地；总
5. 运动能即刻影响DNA

Maybe this will motivate激励 you to work out. New research supports支持 the idea that you don't need to spend hours at the gym everyday for your body to start feeling the positive积极的 effects of exercise. In fact, a single session连续的一段时间 on a stationary固定不动的 bike can affect your *very（adj.）甚至于 DNA*.

Okay, so *your actual真实的 genetic基因的 code* won't morph into改变成 that of Conan野蛮人柯南 （the Barbarian野蛮人）. But exercise sets *signals （in motion）* almost instantly立即地 （that determine是…的决定因素 which genes get turned on and off）. These what-are-called所谓的 epigenetic表观遗传的 changes signal to the muscles to, well, tone up强化. The study is in the journal Cell Metabolism（n.）新陈代谢.

Researchers recruited征募 14 men and women in their mid-20s who didn't usually exercise. After *a short but intense剧烈的 spin使旋转*on a bike, *samples* of their muscle tissue生物组织 showed *temporary暂时的, but big, changes* in several types of epigenetic 外成的 signals. *Further 更进一步的 tests* showed that *some of the same effects* could be achieved获得 with a jolt震惊 of caffeine咖啡因.

Alas唉, black coffee can't provide all the benefits of your morning workout体育锻炼. But if you get to the nearest coffee shop by running, you're definitely肯定地 starting out启程 on the right foot.

也许这篇文章会成为你锻炼的动力。你不必每天花几个小时在体育馆，好让身体开始感觉到运动带来的积极作用，新的研究支持这一观点。实际上，在健身脚踏车上运动一次便会影响你的DNA。

好吧，你实际的基因代码并不会演变成野蛮人柯南那样。但锻炼几乎能马上发送运动信号，这些信号会决定哪些基因开启，哪些关闭。这些所谓的表现遗传变化信号，会使肌肉更强壮。这项研究发表在《细胞代谢》期刊上。

研究人员招募了14名不经常锻炼的25岁左右的男士和女士。在自行车上短暂而剧烈地运动过后，他们腿部肌肉组织的样本显示，表现基因信号发生了短暂但明显的变化。经进一步实验证明，喝一罐咖啡也能产生同样的效应。

不过，黑咖啡并不能提供晨练的所有益处。但是如果你跑步去最近的咖啡店，那你绝对是迈出了正确的一步。

1. motivate [ˈməʊtɪ-veɪt] v.

→you are motivated by something, (尤指情绪)激发，激励，驱使

→someone motivates you to do something, 使决心做;使决意做

1. session [ˈseʃn] n. （进行某活动连续的）一段时间，一场，一节
2. sta-tionary[ˈsteɪ-ʃənri] adj.静止的;不动的
3. very adj.（与某些名词连用，以确指最远的某一位置或时点）极端的

I turned to *the very end* of the book, to read the final words... 我翻到书的最后一页去读最后的文字。

{The opening of a Euro-Disneyland in *the very heart* of France} is a potent 有效的 symbol... 欧洲迪斯尼乐园在法国首都的开业，就是一个有力的标志。

→adj.正是的;合适的;同样的

Everybody says he is the very man for the case... 每个人都说他是接手这个案子的最佳人选。

She died in this very house... 她正是在这间屋子里死去的。

→adj.（与名词连用，强调重要性或严重性）仅仅的，唯独的，甚至于，就连

[At one stage] his very life was in danger... 他的生命都曾一度处于危险之中。

*The very basis* of Indian politics has been transformed... 甚至于印度的政治基础都被改变了。

Mr Campbell said such programmes were 表by their very nature harmful... 坎贝尔先生说此类节目本质上就是有害的。

1. genetic [dʒə-ˈnetɪk] adj.遗传的；基因的
2. morph [mɔ:f] n. v.

one thing morphs into another thing, 改变;变化

1. Barba-rian [bɑ:ˈbeə-riən] n. adj.野蛮人，原始人；异邦人；粗野的人；无教养的人
2. determine [dɪˈtɜ:-mɪn] v.

→a particular factor determines the nature of a thing or event, 是…的决定因素

Social status is largely determined by the occupation of the main breadwinner... 社会地位很大程度上是由家里经济支柱的职业决定的。

→v.决定;敲定

*My aim* was first of all to determine what I should do next. 我的目标，首先是要确定自己下一步该做什么。

We must take into our own hands *the determination* of our future. （n.）我们必须将未来的决定权，掌握在自己的手中。

1. epige-netic [epɪ-dʒɪ-'ne-tɪk] adj. 外成的；生于地表的；后成的；表观遗传的

There are *four known mechanisms* for epigenetic inheritance. 现有四种已知的机理，可以说明表观遗传.

1. tone up 强化，有力

These exercises will tone up your muscles. 这些运动方式会强健你的肌肉.

1. Metabolism [məˈtæbə-lɪzəm] n. 新陈代谢
2. in-tense [ɪnˈtens] adj.①强烈的;剧烈的;极度的。②认真的;集中的;紧张的

The fast-food business is intensely competitive. 快餐业竞争非常激烈。

Suddenly the room filled with intense light... 突然,刺眼的强光照亮了整个房间。

1. spin [spɪn] n. v. (使)旋转

The Earth spins on its own axis... 地球绕着地轴自转。

1. jolt [dʒəʊlt] n. v.①（使）震动；（使）摇动；（使）颠簸。②使震惊；使惊慌；使慌乱不安

The train jolted into motion... 火车猛地一颠，开动了。

*A stinging slap* （across the face） jolted her... 火辣辣的一巴掌打在脸上，她惊呆了。

1. caffeine [ˈkæfi:n] n.咖啡因;咖啡碱
2. Alas ADV （表示悲伤、怜悯等）感叹声； 呜呼； 唉； 可叹。

Such scandals have not, alas, been absent... 这样的丑事，唉，也不是没有。

1. start out启程，出发；开始[着手]做
2. 人类或许会自食恶果 吃掉扔进海洋中的塑料垃圾

There are now at least *five major garbage patches片块* in the world's oceans, and *much of that trash* is plastic.

But [last month] researchers said they can only account for解释 *one percent* of the plastic they'd expect to find in the oceans. So, where'd *the rest of it* go? Well, animals eat *some of it*. Plastic has been found in turtles海龟, seabirds, fish, plankton浮游生物, shellfish贝类动物, even bottom-feeding invertebrates无脊椎动物.

But there's another way （sea creatures might be accumulating plastic）: by sucking up吸收 tiny微小的 plastic particles微粒 方式状with their siphons虹吸管 and gills鱼鳃.

Researchers added common *shore岸滨 crabs*螃蟹 ——*Carcinus maenas*滨蟹——to tanks水箱 of seawater海水 （containing millions of *tiny plastic particles*, just 10 microns微米 in diameter直径）. After 16 hours, all the crabs had plastic lodged寄存 in their gills腮. And *the particles* stuck卡住 around [for up to three weeks], too.

The results are in the journal Environmental环境的 Science and Technology.

The longer plastic sits in an animal, researchers say, the better the chances it will travel up the food chain. Meaning *all our plastic waste* (n.)废料 could come back to bite us——*or rather*更确切地说 be bitten by us.

"Of course we eat mussels贻贝 [whole完全地], without the shells. But we're potentially潜在可能地 eating plastic, if they're from a site （where there's plastic present）." *Lead researcher* Andrew Watts, of the University of Exeter（城市名）.

"We don't know how much plastic we have in our stomachs… chances are we do have some."

全世界的大洋中，现在至少有五大主要垃圾区域，而且其中绝大多数是塑料垃圾。

但是上个月，研究人员称他们只能找到海洋中百分之一的塑料。那剩下的都去哪了呢? 好吧，动物们会吃掉一些。我们可以在乌龟，海鸟，鱼类，浮游生物，贝类，甚至无脊椎动物身体里发现塑料。

但是也有另外一种方法，那就是海洋生物可以利用其虹管和鱼鳃，吸收微小的塑料颗粒来积累塑料。

研究人员还表示，常见的食草蟹—青蟹身体里所储备的海水中，含有成千上万的塑料粒子，直径只有10微米。16个小时后，在它们的腮部都会留存有塑料微粒。而且这些微粒会停留3周。

这项研究结果已经在《科学与技术》杂志上发表。

塑料在动物身体内时间越长，就越有可能回到食物链中。这就意味着，我们所扔掉的塑料垃圾可能会反咬我们一口，或者说会被我们食用。

“当然我们可以吃贻贝只吃肉，不食壳。但如果它们是来自一个塑料垃圾堆积的海域，我们很可能就会进食塑料。”埃克塞特大学的首席研究员安德鲁瓦特说道。

“我不知道自己胃里会存多少塑料…我们确实可能吃进去一些。”

1. patch [pætʃ] n. 补丁，补片；斑点；小块。（表面上）与周围不同的部分
2. account for 导致；解释

Now, *the gene* （they discovered today） doesn't account for all those cases. 不过，他们现在发现的基因无法解释所有的病例。

→为…提出理由;对…作出说明

How do you account for the company's alarmingly high staff turnover?... 你怎么解释这家公司高得令人忧虑的人员流动率？

1. turtle [ˈtɜ:tl] n.海龟。vi. 捕海龟，捕鳖；（船等）翻没，倾覆

→a boat turns turtle, (船)倾覆，翻身

1. plank-ton [ˈplæŋk-tən] n. 浮游生物
2. shell-fish [ˈʃel-fɪʃ] n. (海生)贝类;甲壳类海生动物
3. inver-te-brate [ɪn-ˈvɜ:tɪ-brət] n. adj.无脊椎动物
4. suck v. 吮吸；吸入；卷进入；吸取

suck up 吸收

→someone is sucking up to a person （in authority） when you do not like the fact 奉承;巴结;拍马屁

She kept sucking up to the teachers, especially Mrs Clements. 她不停地巴结老师，尤其是克莱门特夫人。

1. siphon ['saɪ-fn] n. 虹吸管。v.通过虹吸管吸(或输送、抽干)
2. gill n. （鱼等的）鳃
3. crab [kræb] n.蟹;螃蟹

shore crab食草蟹

1. Carcinus maenas 滨蟹。是欧洲和北非的原生物种
2. seawater ['si:wɒtə] n. 海水；海流
3. micron [ˈmaɪ-krɒn] n. 微米(μm)
4. lodge v.①寄宿；租住。②收容；安置；安顿。③卡住；搁住；嵌入。④铭记；留存

The building （he was lodged in） turned out to be a church. 原来，他租住的那栋建筑是一座教堂。

They lodged the delegates in different hotels. 他们把代表团的成员安顿在不同的酒店。

His car has a bullet （lodged in the passenger door）. 他的车在客座位的门上嵌着一颗子弹。

It just lodged in my mind as a very sentimental song... 这首歌令人感怀不已，我已牢牢记住。

1. or rather 更确实地，更确切地说

I met him very late on Friday night, or rather, early on Saturday morning. 我在星期五深夜见到他, 更确切地说是在星期六凌晨.

1. whole adv. (表示强调)完全地

It was like seeing *a whole different side* of somebody... 这就像是看到一个人完全不同的一面。

1. chances are we do have some. 这是个倒装句，正常应该是： we are do have some chances.