

3.31 蛋学长外刊精读 | 见多识广：更好的鞋子能让你跑得更快吗？



March 1st 2025 【Science & technology】

Well **informed**: Do better shoes help you run faster?

见多识广：更好的鞋子能让你跑得更快吗？

Yes but the **benefits** won't last

能，但好处不会持续太久

【1】MODERN COMPETITIVE running entered a new era in 2016, when Nike began **distributing** a **prototype trainer** to **elite** runners. The new shoes were designed to look like Nike's top **publicly** available model, the Zoom Streak 6, but the **soles** **featured** a revolutionary new design. Athletes wearing the **prototype** shoes took home all three **medals** at the men's Olympic **marathon** in Rio de Janeiro that year. Regular runners were able to get their hands on them in 2017 when the company **unveiled** the Zoom Vaporfly 4% (the figure **refers** to efficiency gains **measured** in lab tests), the first true super shoe.

2016年，耐克开始向精英跑者分发一款原型跑鞋，现代竞技跑步进入了一个新时代。这款新鞋的设计外观与耐克公开销售的顶级鞋款Zoom Streak 6相似，但鞋底采用了革命性的新设计。

当年，穿着这款原型鞋的运动员在里约热

中文导读

能，但好处不会持续太久

informed /ɪn'fɔːmd/ adj. 见多识广的，有学问的，有见识的，知情的 v. 通知，了解，知会，通告，熟悉，对...有影响 inform 的过去分词和过去式 **They informed him that they wished reconciliation.** 他们告诉他，他们愿意和解。

benefits /'benəfit/ n. 优势，益处，成效，福利费（政府对失业者、病人等提供的补助金），（公司提供的）福利，奖金，（保险公司支付的）给付，保险金 v. 对（某人）有用，使受益 得益于，得利于 benefit 的第三人称单数和复数

1

distributing /dɪ'strɪbjʊt/ v. 分发，分配，分销，使散开，使分布，分散 distribute 的现在分词 **The farmers were distributing manure over the field.** 农民们正在田间施肥。

prototype /'prəʊtətaɪp/ n. 原型，雏形，最初形态 **This is the prototype for future school buildings.** 这是未来的学校建筑的蓝本。

trainer /'treɪnə/ n. 教练，驯兽师，运动鞋，便鞋，教员 **He is an animal trainer for the circus.** 他是马戏团的驯兽师。

elite /eɪ'liːt/ n. 精英，上层集团，（统称）掌权人物 **Caravansary greatly increases trade, and allows the recruitment of elite camel cavalry.** 商队客栈能够提高显著城堡贸易，同时允许城堡组建精锐骆驼骑兵部队。

publicly /'pʌblɪkli/ adv. 公开地，当众地，以公众名义，由公众、由政府（出资或持有等） **Protesters are calling for a public hearing.** 抗议者要求召开公开听证会。

soles /'sɔːles/ n. 鞋底，脚底（板），脚掌，鞋底，有...底的 v. 给（鞋）换底 sole 的第三人称单数和复数 **KAVASS canvas shoes have soft and comfortable inside sole.** KAVASS 帆布鞋内底柔软舒适，接缝无毛边，穿着舒适，绝无拱起凹陷现象。

featured /'fi:tʃəd/ v. 以...为特色，由...主演，以...为主要组成，起重要作用，占重要地位 adj. 面貌秀丽的；作为特色[号召物]的；有...面貌特征的 feature 的过去分词和过去式 **This programme features Maronite and Ambrosian Chants.** 本集介绍马龙派及安布罗斯圣咏。

medals /'medl/ n. 奖章，勋章 v. （在比赛中）获得奖牌（或奖章） medal 的第三人称单数和复数 **the bestowal of Medals of Honor** 授与荣誉勋章

marathon /'mæɪrəθ(ə)n/ n. 马拉松赛跑（距离约42公里，合26英里），马拉松式的活动（或工作） adj. 需要极大持久力的 v. 参加持久比赛

unveiled /,ʌn'veɪld/ v. 为...揭幕，揭开...上的覆盖物，拉开...的帷幔，（首次）展示，介绍，推出，将...公之于众 unveil 的过去分词和过去式 **The monument was unveiled with great solemnity.** 纪念碑的揭幕庄严而肃穆。

内卢（Rio de Janeiro）奥运会男子马拉松比赛中包揽了前三名。2017年，耐克推出了Zoom Vaporfly 4%（该数字指的是实验室测试中测得的效率提升百分比），普通跑步者也终于有机会拥有这款鞋，这是第一款真正的“超级跑鞋”。

【2】"Most super shoes follow the same pattern," explains Jens Jakob Andersen, founder of RunRepeat.com, a website that road-tests trainers and dissects them to **reveal** their **secrets**. They **typically** have curved **soles** made of a **stiff** carbon **plate** sandwiched between **layers** of **specially engineered** **springy foam**. The result is often very **thick**—up to 40mm tall at the heel, the **maximum** allowed for competitive **racing** (regular trainers are usually around 25-35mm tall). Panda Foreign Magazine Intensive Reading: Respect for Originality, Piracy Must Be Punished

“大多数超级跑鞋都遵循相同的模式。”RunRepeat.com创始人延斯·雅各布·安德森（Jens Jakob Andersen）说。该网站会对跑鞋进行实地测试，并对其进行拆解以揭示其秘密。它们通常具有弯曲的鞋底，由夹在特制弹性泡沫层之间的硬质碳板制成。因此，这种鞋底的厚度往往很大，鞋跟处高达40毫米，这是竞技赛跑所允许的最大厚度（普通跑鞋的鞋跟高度通常在25-35毫米左右）。

【3】These features make running easier. Lab tests have shown that **recreational** runners use less oxygen and report feeling less tired while jogging in **premium** trainers compared with regular ones. Platformed **soles** encourage a slightly longer **stride**, which means fewer steps per kilometre. And a squishy base, which absorbs impact before **bouncing** back up, **eases** the **strain** on leg **muscles**. By reducing the energy needed to **maintain** normal pace, super shoes allow runners to

refers /rɪˈfɜːz/ v.谈及;提到;提及,称...(为),指,涉及,描述 refer的第三人称单数

measured /ˈmeɪzəd/ adj.仔细斟酌的,缓慢谨慎的,慎重的,克制的v.测量,度量,(指尺寸、长短、数量等)量度为,估量,判定(重要性、价值或影响等)measure的过去分词和过去式 **He measured the height of the bridge.**他测量了桥的高度。

2

reveal /rɪˈviːl/ v.揭示,显示,透露,显出,露出,展示n.启示,窗侧壁,门侧,(汽车的)窗框 **I have no guilty secret to reveal.**我没有问心有愧的秘密可言。

secrets /ˈsiːkrɪt/ n.秘密,机密,诀窍,秘诀,奥秘,奥妙secret的复数 **Don't babble the secret (out) to them.**别多嘴把秘密泄露给他们。

typically /ˈtɪpɪklɪ/ adv.典型的,通常,一般,典型地,具有代表性地,不出所料,果然 **Typically caused by midfrequency distortions in an analog system.**在模拟系统中通常是由中频信号的失真所引起。

stiff /stɪf/ adj.不易弯曲(或活动)的,硬的,挺的,僵硬的,一动就疼的,稠的,难搅动的,困难的,不友好的,高昂的,烈性的adv.非常,极其,(冻)僵,(冻)硬n.死尸vt.诈骗,不还钱,(尤指)不给小费 **I was bored stiff with my project.**我对我的计划极为厌烦。

plate /pleɪt/ n.(地壳)板块;盘子,碟子,一盘所盛之量,一盘,一道主菜,(金属)板条,板材,(刻有名字等的)金属牌子,(车辆的)号码牌,镀金(或镀银)的金属,金的(或银的)餐具,盾片,板块,书籍插图照片,(印刷用的)印版,图版,(玻璃、金属等)底片,感光板vt.电镀(尤指镀金、镀银),为...加设护板,(用金属板等)覆盖 **He emptied the biscuits onto the plate.**他把饼干全部倒在盘子上。

layers /ˈleə/ n.层,表层,层次,阶层v.把...分层堆放layer的第三人称单数和复数 **The Therme Vals is built from layer upon layer of locally quarried Valser Quarzite slabs.**瓦尔斯温泉建立在当地开采过石头的原址上,这种石头成为设计的灵感来源。

specially /ˈspeʃəli/ adv.专门地,特意,格外,特别,尤其 **A special subcommittee adjudicates on planning applications.**有一个特别小组委员会裁决规划申请项目。

engineered /ˌendʒɪˈniəd/ v.密谋策划,设计制造,改变...的基因(或遗传)结构engineer的过去分词和过去式

springy /ˈsprɪŋɪ/ adj.有弹性(或弹力)的,矫健的,有活力的 **the springy turf.**富有弹性的草皮。

foam /fəʊm/ n.泡沫橡胶,海绵橡胶,泡沫,泡沫剂(用于洗涤、剃须、灭火等)vi.有泡沫,起泡沫 **The best foaming condition is happened by adding 7% PYA resin and 4% foaming agent.**实验结果显示聚七烯醇树脂浓度为7%及发泡剂添加比例为4%时具有最佳发泡结构。

thick /θɪk/ adj.厚的,粗的,(询问或说明厚度)有...厚,浓密的,稠密的,茂密的,浓的,能见度低的,拥挤的,迟钝的,浓重的,嘶哑的,不清的,亲密的n.最拥挤部分,活动最多部分,事物的粗大浓密部分adv.厚厚地 **The corn was thick in the field.**田里的麦子长得很茂盛。

maximum /ˈmæksɪməm/ n.最大限度,最大量,最高限度adj.最高的,最多的,最大极限的 **This hall holds a maximum of seventy people.**这厅最多能容纳七十人。

put more effort into going faster.

这些设计让跑步变得更轻松。实验室测试表明，与穿着普通跑鞋相比，穿着高端跑鞋的休闲跑者在慢跑时消耗的氧气更少，感觉也没那么累。加厚的鞋底鼓励跑者采取稍长的步幅，这意味着每公里步数减少。而柔软的鞋底在回弹之前能吸收冲击力，减轻了腿部肌肉的负担。通过减少保持正常步速所需的能量，超级跑鞋让跑者能够投入更多精力去提高速度。

【4】The results are clear. Our analysis shows that, of the 50 **fastest** men's **marathon** times, only nine **predate** 2017; the figure for women is just three. In the eight years since the launch of the Nike Vaporfly, more than three times as many men's marathons were completed in under two hours and five minutes than in the eight **preceding** years. Before super shoes, only 26 women's races had been run in less than 2:20. In 2024 alone there were 35. High-tech trainers have been **estimated to shave** between one and four minutes off **elite marathon** times.

结果显而易见。我们的分析显示，在50个最快的男子马拉松成绩中，只有9个是在2017年之前创造的；而女子的这一数字仅为3个。自耐克Vaporfly推出以来的八年里，男子马拉松成绩在两小时五分钟以内的次数是此前八年的三倍多。

在超级跑鞋出现之前，女子马拉松成绩低于2小时20分的比赛只有26场。仅在2024年，这一数字就达到了35场。据估计，高科技跑鞋能帮助精英跑者将马拉松成绩缩短1到4分钟。

【5】Regular runners benefit too. In 2019 the New York Times **analysed** real-world **marathon** times to measure the speed gains **attributable** to Nike's Vaporfly or Next%—the leading shoes at the time. Using data from Strava, a **fitness** app where users post details of their workouts, they found that runners

racing /ˈreɪsɪŋ/ n. 赛马, 速度比赛 v. (和...) 比赛, 参加比赛, 使比赛, 让... 参加速度比赛, (使) 快速移动, 快速运转 race 的现在分词 adj. 速度比赛的; 比赛用的 **Racing drivers dice with death every time they race.** 赛车手每次比赛都是玩命。

3

recreational /ˌrekriːˈeɪʃənəl/ adj. 娱乐的; 消遣的 **recreational swimming.** 消遣性游泳

premium /ˈpriːmiəm/ n. 保险费, 额外费用, 附加费 adj. 高昂的, 优质的 **This will put a premium on fraud.** 这会助长欺诈歪风。

stride /straɪd/ vi. 大步走, 阔步行走 n. 大步, 一步(的距离), 步态, 步伐, 进展, 进步, 发展, 裤子 **We've managed to match our closest competitors stride for stride as regards prices.** 在价格方面, 我们已设法尽量不输给几个势均力敌的竞争对手。

bouncing /ˈbaʊnsɪŋ/ adj. 健壮的, 茁壮的 v. (使) 弹起, 弹跳, 反射, (在...上) 跳动, 蹦, 把小孩放在膝上颠着玩 bounce 的现在分词 **a bouncing baby.** 一个健康活泼的婴儿

eases /ˈiːzɪz/ n. 容易, 轻易, 不费劲, 舒适, 安逸, 自在, 无忧无虑 v. (使) 宽慰, 减轻, 缓解, (使) 小心缓缓地移动, 使... 容易些 ease 的第三人称单数和复数

strain /streɪn/ v. 拉紧, 损伤, 拉伤, 扭伤, 尽力, 竭力, 使劲, 过度使用, 使不堪承受, 用力推(或拉), 滤 n. 压力, 劳损, 重负, 重压之下出现的问题(或担忧等), 拉力, 张力, 应力, 拉伤, 扭伤, (动、植物的) 系, 品系, 品种, 个性特点, 乐曲 **Their cheerfulness seemed rather strained and artificial.** 他们的快乐表情看上去很勉强而做作。

muscles /ˈmʌslz/ n. 肌肉, 肌, 体力, 权力, 威信, 影响力 v. 强取 muscle 的第三人称单数和复数 **Objective To evaluate inferior oblique muscle myectomy in the management of superior oblique muscle palsy.** 目的探讨下斜肌部分切除术治疗先天性上斜肌麻痹的效果。

maintain /meɪnˈteɪn/ v. 维持, 保持, 维修, 保养, 坚持(意见), 固执己见, 供养 **She maintains that the accusation is groundless.** 她坚持该指控是毫无根据的。

4

fastest /ˈfɑːstɪst/ adv. 快, 快速, 迅速, 不久, 立即, 牢固地, 完全地 adj. 快的, 迅速的, 敏捷的, 迅速发生的, 立即发生的, 动作迅速的, 头脑灵活的 fast 的最高级 **Ostrich is the fastest animal on two legs.** 鸵鸟是双腿跑得最快的动物。

predate /ˈpriːdeɪt/ v. 早于, (在日期上) 先于 **He predated the check by five days.** 他把支票上的日期填早了五天。

preceding /ˈpriːsiːdɪŋ/ v. 在...之前发生(或出现), 先于, 走在...前面 adj. 在前的, 前面的 precede 的现在分词 **A major precedes a captain in rank.** 少校军阶高于上尉。

estimated /ˈestɪmeɪtɪd/ v. 估算; 估价 adj. 估计的; 预计的; 估算的 estimate 的过去分词和过去式 **His arrogance lowered him in her estimation.** 他的妄自尊大降低了他在她心目中的位置。

shave /ʃeɪv/ v. 刮胡子, 剃(须发), (尤指) 刮脸, (少量地) 削减, 调低, 降价 n. 修面, 刮脸, 剃须 **A sharp razor gives a close shave.** 剃刀锋利刮得就干净。

5

wearing super shoes completed races 4-5% faster than those in average trainers, even after **controlling** for ability and training. Their analysis also showed that wearing the **premium** shoes gave runners a 73% chance of setting a personal best.

普通跑者同样也能从中受益。2019年，《纽约时报》分析了实际马拉松成绩，以衡量耐克Vaporfly或Next%（当时领先的跑鞋）所带来的速度提升。研究利用了 Strava 健身应用的数据，该应用会记录用户的运动情况。他们发现，即使在控制了跑者的能力和训练水平后，穿着超级跑鞋的跑者完成比赛的速度仍比普通跑鞋的跑者快4-5%。分析还显示，穿着这款高端跑鞋让跑者创造个人最佳成绩的概率提高了73%。

【6】 This extra speed doesn't come cheap. Adidas's top model, the Pro Evo 1—**worn** by Ethiopia's Tigst Assefa during her record-breaking Berlin marathon in 2023—cost \$500 and are **marketed** as a single-race shoe. As the miles add up, most super shoes quickly lose **grip** and the **foam** in the sole deteriorates, **dampening** their **signature springiness**. Panda Foreign Magazine Intensive Reading: Respect for Originality, Piracy Must Be Punished

这种速度提升可并不便宜。埃塞俄比亚选手蒂格斯特·阿塞法（Tigst Assefa）在2023年柏林马拉松赛中穿着阿迪达斯的顶级鞋款Pro Evo 1打破了纪录。这款鞋被宣传为一次性赛事用鞋，售价500美元。随着里程数的增加，大多数超级跑鞋很快就会失去抓地力，鞋底泡沫也会劣化，降低原本的高弹回弹效果。

【7】 So, with a big race **approaching**, and money to spend on new **kicks**, runners may wonder about the best **sneaker strategy**. In Mr Andersen's opinion, super shoes should be broken in a little: he suggests around 20-50km of pre-race use to reduce the risk of

analysed /'ænəlaɪzd/ v.分析analyse的过去分词和过去式 The doctor **analysed** the blood sample for anaemia.医生化验血样看是否贫血。

attributable /ə'trɪbjətəbl/ adj.可能由于,可归因于 Unattributable items shall be allocated to Licensed Service segments using the Attributable Cost Method.三无法直接或间接归属者,按已分摊成本法归属至各种电信业务。

fitness /'fɪtnəs/ n.健身,健康,健壮,适合(某事物或做某事) Physical **fitness** is having a strong healthy body.身体健康就是有一个强壮健康的身体。

controlling /kən'trəʊlɪŋ/ v.指挥,控制,掌管,支配,限制,限定,阻止蔓延(或恶化)control的现在分词 He was **arrested on charges of controlling prostitutes**.他因为被指控操纵娼妓而被捕。

6

worn /wɔ:n/ adj.穿坏的,用坏的,用旧的,磨薄的,疲惫的,筋疲力尽的v.穿戴,穿,戴,佩戴,蓄,留(发、须等),流露,面带,呈现(某种神态)wear的过去分词 I'm tired, **worn to a frazzle**.我累了,累得精疲力竭。

breaking /'breɪkɪŋ/ v.(使)破,裂,碎,弄坏,损坏,坏掉,弄破,使流血n.中断;休息;破裂;机会break的现在分词 Things have been **breaking well for them**.他们的事情进展很顺利

marketed /'mɑ:kɪtɪd/ v.推销,促销market的过去分词和过去式

grip /grɪp/ n.紧握,紧抓,控制,影响力,理解,了解,不打滑,把手,(拍摄电影时)摄影机和照明设备管理人员,旅行袋v.紧握,紧抓,使感兴趣,使激动,吸引住(某人)的注意,对...产生强有力的影响,抓牢 I've changed my **grip** and my **backswing**.我改变了握拍法和向后挥拍击球的姿势。

dampening /'dæmpənɪŋ/ v.弄湿,使潮湿,抑制,控制,减弱(感情、反应等)dampen的现在分词

signature /'sɪgnətʃə/ n.签名,署名,签字,签署,明显特征,鲜明特色,识别标志 Whose else **signature** could I get? 还有哪些人的署名我可以取得呢?

springiness /'sprɪŋɪnəs/ n.弹性;轻快 He says, will for a long time look "the capital market that believes us is agile and **springiness**, can answer these adjustment".他说,长期来看“相信我们的资本市场灵活并富于弹性,能够应对这些调整”。

7

approaching /ə'prəʊtʃɪŋ/ v.(在距离或时间上)靠近,接近,接洽,建议,要求,(在数额、水平或质量上)接近approach的现在分词 The sky darkled at the **approaching storm**.风暴来临前天空渐渐暗了下来。

kicks /kɪks/ v.踹,踢蹬,踢(腿),(因干了蠢事、失去良机等)对(自己)生气n.踢,踢脚,踢腿,极度刺激,极度兴奋,极大的乐趣,(毒品或酒精的)效力,刺激性kick的第三人称单数和复数

sneaker /'sni:kə/ n.运动鞋;卑鄙者;鬼鬼祟祟做事的人 83. Rock your baggies and **sneakers** as you earn points knockin over trash cans, hittin boxes out of dumpsters, breakin windows and blowin up gas canisters.

blisters and improve race-day performance (some foams get bouncier after a small amount of wear).
Buying a new pair of shoes for every race makes for an expensive habit, but it could be worth it for those **desperately chasing** a personal best.

因此，当一场大赛临近，跑者们如果打算花钱买新鞋，可能会想知道使用跑鞋的最佳策略。安德森先生认为，超级跑鞋应该稍微磨合一下。他建议在赛前穿着跑20-50公里，以减少起泡的风险并提升比赛当天的表现（一些泡沫材料在轻微磨损后会变得更有弹性）。虽然每场比赛都买一双新鞋的成本不高，但对于那些全力冲击个人最佳成绩的跑者而言，这可能是值得的投入。

今日词汇

positive ['pɒzətɪv]

a. 肯定的、积极的；

正的；确凿的、无疑的；阳性的

考研出现次数：10+

考频：★★

考点回顾

阅读考点真题例句：

[例] By citing the example of poets Wordsworth and Baudelaire, the author intends to show that art grow out of both positive and negative feeling. (2006年英语一36题)

[译] 通过引用诗人华兹华斯和波德莱尔的例子，作者旨在说明艺术既源于正面情绪也源于负面情绪。

翻译考点真题例句：

[例] But that's exactly the kind of false cheerfulness that positive psychologists wouldn't recommend.

[译] 但这正是那种积极心理学家并不提倡的虚假的快乐。(2014年英语二46题)

②长难句

- 原文: **Lab tests** have shown that **recreational runners** use **less oxygen** and report feeling **less tired** while jogging in premium trainers compared with regular ones.
- 分析: 主句的结构为主 (**Lab tests**) 谓 (**have shown**) 宾语从句 (**that recreational runners use less oxygen and report feeling less tired**) 宾 (**less oxygen, less tired**)。
- 译文: 实验室测试表明，与穿着普通跑鞋相比，穿着高端跑鞋的休闲跑者在慢跑时消耗的氧气更少，感觉也没那么累。

1. 原文: Using data from Strava, **a fitness app** where **users** post **details** of

穿着袋状裤和高尔夫球鞋自由挥洒，击中圾桶，在圾中击中箱子，打破窗玻璃，或者击中瓦斯罐都有分数奖励。

strategy /'strætɪdʒɪ/ n. 策略, 计策, 行动计划, 策划, 规划, 部署, 统筹安排, 战略, 战略部署 The nation's geopolitical strategy is yet uncharted. 该国的地缘政治的策略还不被人所知

blisters /'blɪstə/ n. (金属、油漆过的木头或其他表面上的) 泡, 气泡, 水泡, (皮肤上摩擦或烫起等的) 水泡, 疱 v. (使) 起疱, 起泡, (使表皮等) 涨破, 爆裂, 猛烈抨击, 严厉批评 blister 的第三人称单数和复数 His new shoes raised blisters on his feet. 他的新鞋把他的脚磨起了水泡。

desperately /'despərətli/ adv. 拼命地, 绝望地, 不顾一切地, 极度地, 猛烈地 I am desperate for a cigarette. 我极想抽一支烟。

chasing /tʃes/ v. 追赶, 追逐, 追捕, 努力获得, 争取得到, 追求, 求爱 n. 雕镂术, 车螺丝雕镂, 铸件最后抛光 The ferocious panther is chasing a rabbit. 那只凶猛的豹子正追赶一只兔子。

①短语:

1. 原文: The new shoes were designed to look like Nike's top publicly available model, the Zoom Streak 6, but the soles featured a revolutionary new design.

词典: **look like** 看起来像

例句: They **look like** stars to the naked eye. 用肉眼看上去它们像星星。

2. 原文: Regular runners were able to get their hands on them in 2017 when the company unveiled the Zoom Vaporfly 4% (the figure refers to efficiency gains measured in lab tests), the first true super shoe.

词典: **get their hands on** 得到, 获得

例句: Plenty of whirlybird pilots will be keen to **get their hands on** the real thing. 很多直升机飞行员都将渴望双手能够摸到真家伙。

3. 原文: Lab tests have shown that recreational runners use less oxygen and report feeling less tired while jogging in premium trainers compared with regular ones.

词典: **compared with** 与……相比

例句: His fee is a drop in the ocean **compared with** the real cost of broadcasting. 他的费用与广播的实际成本相比是沧海一粟。

4. 原文: And a squishy base, which absorbs impact before bouncing back up, eases the strain on leg muscles.

词典: **back up** 堵塞, 支持, 回弹

例句: In this article, you need to **back up** general statements with specific examples. 在这篇文章中, 你需要用具体的例子来支撑笼统的语句。

5. 原文: In the eight years since the launch of the Nike Vaporfly, more than three times as many men's marathons were completed in under two

their workouts, **they found that runners** wearing super shoes **completed races** 4-5% faster than those in average trainers, even after controlling for ability and training.

2. 分析：主句的结构为主（**they**）谓（**found**）宾语从句（**that runners** wearing super shoes **completed races** 4-5% faster than those in average trainers），**that**引导宾语从句，从句的结构是主（**runners**）谓（**completed**）宾（**races**）。**where**引导定语从句，先行词是**a fitness app/Strava**从句的结构是主（**users**）谓（**post**）宾（**details**）。

3. 译文：研究利用了Strava健身应用的数据，该应用会记录用户的运动情况。他们发现，即使在控制了跑者的能力和训练水平后，穿着超级跑鞋的跑者完成比赛的速度仍比普通跑鞋的跑者快4-5%。

③写作技巧：

1. Lab tests have shown that recreational runners use less oxygen and report feeling less tired while jogging in premium trainers **compared with** regular ones.

译文：实验室测试表明，与穿着普通跑鞋相比，穿着高端跑鞋的休闲跑者在慢跑时消耗的氧气更少，感觉也没那么累。

技巧：**compared with与.....相比**，此处运用了对比的修辞手法，将高端跑鞋在慢跑时的耗氧量与普通跑鞋的进行对比，表明高端跑鞋让人跑步更轻松。

⑤段落大意：

【1】超级跑鞋的发布使得现代竞技跑步进入了一个新时代。

【2】RunRepeat.com创始人延斯·雅各布·安德森揭秘跑鞋结构特性。

【3】这些特性让跑步变得更轻松。

【4】高科技跑鞋能帮助精英跑者将马拉松成绩缩短1到4分钟。

【5】普通跑者也能从超级跑鞋中受益。

【6】超级跑鞋的价格昂贵。

【7】使用跑鞋的最佳策略。

hours and five minutes than in the eight preceding years.

词典：**more than**超过

例句：They pay slightly **more than** the going rate.

他们支付的酬金略高于现行标准。

6. 原文：Using data from Strava, a fitness app where users post details of their workouts, they found that runners wearing super shoes completed races 4-5% faster than those in average trainers, even after controlling for ability and training.

词典：**in average**平均

例句：Twenge and her colleagues wanted to understand why this

change **in average** wellbeing occurred.

特温格和她的同事们想要了解为什么平均幸福感会发生这样的变化。

7. 原文：As the miles add up, most super shoes quickly lose grip and the foam in the sole deteriorates, dampening their signature springiness.

词典：**add up**总计，合计

例句：**Add up** all the income you've received over the period in question.

把相关时期内你获得的所有收入加起来。

④背景知识：

1. Olympic in Rio de Janeiro: 里约热内卢奥运会。2016年里约热内卢奥运会，即第31届夏季奥林匹克运动会（Games of the XXXI Olympiad），于2016年8月5日至21日在巴西里约热内卢举行，主会场是马拉卡纳体育场。里约热内卢成为第一个举办夏季奥运会的南美城市。该赛事也是第一届由葡萄牙语国家举办和第一届完全在主办国冬季期间举办的夏季奥运会。