0056 Reproductive Problems in Both Men and Women Are Rising at an Alarming Rate

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1. Reproductive Problems in Both Men and Women Are Rising at an Alarming Rate

男性和女性的生殖问题都在以惊人的速度上升

The whole spectrum 范围;各层次;幅度;光谱 of reproductive (a.)生殖的;繁殖的 problems in males /are increasing by about 1 percent per year /in Western countries. This "1 percent effect" includes the rates of declining 减少,下降 sperm 精子 counts, decreasing 减少;降低 testosterone 睾酮;睾丸素 levels and increasing rates of testicular 睾丸的 cancer, as well as a rise in the prevalence 流行,盛行 of erectile (a.)勃起的 dysfunction 机能障碍; 功能不良.

On the female side of the equation, **miscarriage** 流产 rates are also increasing /by about 1 percent per year in the U.S., and so is the rate of **gestational 妊娠期的**; 受孕的 surrogacy (n.)代孕. Meanwhile, the total **fertility 能生育性;可繁殖性 rate** worldwide /has dropped by nearly 1 percent per year /from 1960 to 2018.

Example 1. 标题

spectrum

a complete or wide range of related qualities, ideas, etc. 范围;各层次;系列;幅度

- a broad spectrum of interests 广泛的兴趣范围
- We shall hear views from across the political spectrum. 我们要听取各个政治派别的看法。

testosterone

a hormone produced in men's testicles that causes them to develop the physical and sexual features that are characteristic of the male body 睾酮;睾丸素.

是一种类固醇荷尔蒙,由男性的睾丸或女性的卵巢分泌,肾上腺亦分泌少量睾酮,具有维持肌肉强度及质量、维持骨质密度及强度、提神及提升体能等作用。

在西方国家,男性的整个生殖问题范围每年增加约 1%。这种"1%的影响"包括精子数量下降、睾丸激素水平下降和睾丸癌发病率上升,以及勃起功能障碍患病率上升。在等式的女性方面,美国的流产率也在以每年约 1%的速度增长,代孕率也是如此。与此同时,从 1960 年到 2018 年,全球总生育率每年下降近1%。

It is a huge deal! It **adds up to** more than 10 percent per decade /and more than 50 percent over 50 years. When you consider that /sperm counts declined (v.) by 50 percent /in just 40 years, ...

Example 2. 标题

这是一件大事!它每十年加起来超过10%,50年加起来超过50%。当你考虑到精子数量在短短40年内下降了50%时,...

主 The annual 1 percent decline /in reproductive 生殖的,繁殖的 health 系 is faster than the rate of global warming. To put the 1 percent effect in perspective 景观;远景;客观判断力;权衡轻重的能力, consider this: scientific data show a 1.1

percent per year increase /in the number of children /diagnosed (v.)诊断 with **autism 自闭症;孤独症 spectrum 光谱,幅度 disorder** 失调;紊乱;不适;疾病 /between 2000 and 2016, according to the Centers for **Disease Control and Prevention**.

Example 3. 标题

perspective

- ~ (on sth)a particular attitude towards sth; a way of thinking about sth 态度; 观点;思考方法
- a global perspective 全面的看法
- Try to keep these issues in perspective.要尽量恰当地处理这些问题。

每年 1% 的生殖健康下降速度,快于全球变暖的速度.要正确看待 1% 的影响,请考虑以下几点:根据美国疾病控制与预防中心的数据,科学数据显示,在2000年至2016年期间,被诊断患有"自闭症谱系障碍"的儿童人数,每年增加1.1%。

They're just too synchronous (a.)同时发生(或存在)的;同步的;共时的 for that to be possible. The truth is, these reproductive health effects are interconnected 连通的;有联系的, and they are largely driven 受...影响的;由...造成的 by a common cause: the presence 存在;出现 of hormone-altering 变更 chemicals (a.k.a. 亦称;又名, endocrine-disrupting 内分泌干扰物 chemicals, or EDCs 环境激素) in our world. These hormone-hijacking 劫持 chemicals, which include phthalates, bisphenol A, and flame 火焰,燃烧 retardants 延缓化学反应的物质, among others, have become ubiquitous (a.)普遍存在的,无所不在的 in modern life. They're in water bottles and food packaging, electronic 电子的;电子器件的 devices, personal-care products, cleaning supplies 清洁用品 and many other items we use regularly. And they began being produced (v.) in increasing numbers after 1950, when sperm counts and fertility 谓 began their decline.

Example 4. 标题

a.k.a.

abbr. 亦称;又名(also known as)

endocrine

(biology 生) connected with glands that put hormones and other products directly into the blood 内分泌腺的; 内分泌的

 \rightarrow endo-, 内,里面,来自en-的扩大形式。-crine, 分开,分泌,词源同crisis, discriminate.

phthalate

N a salt or ester of phthalic acid. Esters are commonly used as plasticizers in PVC; when ingested they can cause kidney and liver damage 邻苯二甲酸 盐

起到增塑剂的作用。它被普遍应用于玩具、食品包装材料、医用血袋和胶管、 乙烯地板和壁纸、清洁剂、润滑油、个人护理用品(如指甲油、头发喷雾剂、 香皂和洗发液)等数百种产品中.

2017年10月27日,世界卫生组织国际癌症研究机构,公布的致癌物清单初步整理参考,二(2-乙基己基)邻苯二甲酸酯,在2B类致癌物清单中。

bisphenol

a. [有化] 双酚; 丙二酚

双酚A,也称BPA.60年代以来就被用于制造塑料(奶)瓶、幼儿用的吸口杯、食品和饮料(奶粉)罐内侧涂层。但BPA也能导致内分泌失调,威胁着胎儿和儿童的健康。欧盟认为含双酚A奶瓶会诱发性早熟.

flame retardant

阻燃剂:一种化学物质,用于减缓或阻止火焰蔓延,通常添加在材料或产品中以提高其防火性能。

cleaning supplies

清洁用品:用于清洁和消毒的各种产品,如清洁剂、抹布、刷子等。

这些生殖变化几乎不可能是巧合。它们太同步以至于不可能。事实是,这些生殖健康影响是相互关联的,而且它们在很大程度上是由一个共同的原因驱动的:我们世界中存在改变激素的化学物质(又名内分泌干扰化学物质或EDC)。这些激素劫持化学物质,包括邻苯二甲酸盐、双酚 A 和阻燃剂等,在

现代生活中无处不在。它们存在于水瓶和食品包装、电子设备、个人护理产品、清洁用品和我们经常使用的许多其他物品中。 1950 年之后,精子数量和生育能力开始下降,它们开始大量生产。

主 Exposure to these chemicals 系 is especially problematic (a.)造成困难的;产生问题的 during pregnancy /because 主 what happens during pregnancy 谓 doesn't stay in pregnancy. Rather 相反,反而,而是,主 an expectant 预期的;期望的,未来的(母亲、父亲、父母) mother's exposure (n.) to toxic chemicals in the air /she breathes, the water /she drinks, the foods /she eats /and the products she slathers (v.)(在…上)厚厚涂抹 on her skin / 谓 can enter (v.) her body (and hence 因此;由此 the fetus 胎儿) /and influence her baby's reproductive development 生殖发育. This is particularly true /early in pregnancy —in what's called the reproductive programming window —and it's especially true /for male babies.

Example 5. 标题

怀孕期间接触这些化学物质,尤其成问题,因为怀孕期间发生的事情,其影响不会只留在怀孕期间。相反,准妈妈接触到她呼吸的空气、喝的水、吃的食物,和涂在皮肤上的产品中的有毒化学物质,会进入她的身体(进而影响胎儿),并影响婴儿的生殖发育。这在怀孕早期尤其如此——在所谓的生殖编程窗口——对男婴来说尤其如此。

For example, if a woman is exposed to chemicals /that block the action of androgens 雄激素 /during the first trimester 妊娠期(以三个月为单位) of pregnancy, this can affect the **reproductive development** 生殖发育 of the male fetus/ in numerous (a.)众多的;许多的 ways. It can **result in** a shortening(使)缩短,变短 of **the anogenital 肛殖的 distance** (AGD), the span 跨度 from the anus 肛门 to the base of the penis 阴茎, which is significant /because research has shown that /a shorter AGD **correlates with** a smaller penis and, in the adult 成年人, a lower sperm count.

In addition, **prenatal 产前的**; **胎儿期的 disruption** of the male hormonal system /can **result in** reduced (v.) testosterone 睾酮,睾丸素 levels /and increase (v.) the risk /that a baby boy will have **undescended 未降入阴囊的**(睾丸); **内隐的 testicles** 睾丸 (cryptorchidism 隐睾症) /or a particular type of **malformed 畸形的**, **难看的 penis** (hypospadias 尿道下裂) at birth. And if a boy is born with these genital 生殖的; 生殖器的 defects 缺点; 缺陷; 毛病, he will have an increased risk of **low sperm count** /and **testicular 睾丸的 cancer** as an adult.

Example 6. 标题

Anogenital Distance	采集	

undescended

(medical 医) (of a testicle 睾丸) staying inside the body instead of moving down normally into the scrotum 未下降 (入阴囊) 的;内隐的

cryptorchidism

/krɪp'tɔ:rkɪdɪzəm/ 隐睾症

睾丸在正常发育过程中,会从腰部腹膜后,下降至阴囊.如果没有出现下降,或下降不全,阴囊内没有睾丸,或只有一侧有睾丸,称之为"隐睾症".临床上也称为"睾丸下降不全"或"睾丸未降"。

"隐睾"是小儿泌尿生殖系最常见的先天畸形之一,多表现为单侧,并以右侧未降为主,约15%为双侧。早产儿发病率约为30%,健康新生儿约为3%,3月时约为1%。

"隐睾"时, 因睾丸长期留在腹腔内或腹股沟管里, 受体内"高温"的影响, 容易造成男性不育。

另外,"隐睾"由于生长环境改变,以及发育上的障碍,会使睾丸细胞发生恶变,形成恶性肿瘤."隐睾"发生恶变的机会,大约是正常位置睾丸的30~50倍。

hypospadias

/ˌhaɪpəˈspeɪdiəs/ 尿道下裂

"**尿道下裂"是一种男性尿道开口位置异常的先天缺陷**,尿道口可分布在正常尿道口至会阴部的连线上,多数病人可伴有阴茎向腹侧弯曲。尿道下裂是小儿泌尿系统中的常见畸形,国外报道发病率可高达125~250出生男婴中有1个尿道下裂。

例如,如果一名妇女在怀孕的前三个月,接触到阻断雄激素作用的化学物质,这可能会以多种方式影响男性胎儿的生殖发育。它会导致肛门生殖器距离(AGD)缩短,即从肛门到阴茎根部的跨度,这很重要,因为研究表明,较短的AGD与较小的阴茎相关,而在成人中,较低的精子数量。此外,男性荷尔蒙系统的产前紊乱,会导致睾丸激素水平降低,并增加男婴出生时"睾丸未降(隐睾症)"或"特定类型畸形阴茎(尿道下裂)"的风险。如果一个男孩天生就有这些生殖器缺陷,他成年后患精子数量少和睾丸癌的风险,就会增加。

But **endocrine 内分泌腺的;内分泌的 disruption** is also a culprit 肇事者;引起问题的事物;犯错的人;罪犯 in rising (v.) rates of **autoimmune (a.)自体免疫的;自身免疫的 disorders** /as well as the growing **epidemic 流行病,传染病 of obesity** 过度肥胖,肥胖症 and **metabolic 新陈代谢的 syndrome** 综合征,征群 (a cluster of conditions /that increases the risk of heart disease, stroke and type 2

diabetes 糖尿病). Some of these **reproductive effects** 对生殖的影响 /**are even associated with** an increased risk of premature 未成熟的;过早的,提早的;早产的 death.

Example 7. 标题

culprit

来自culp-,责备,谴责,词源同inculpable.

metabolic syndrome

N a condition associated with obesity including symptoms such as glucose intolerance, insulin resistance, and raised blood pressure, which increases the risk of cardiovascular disease and diabetes 新陈代谢综合症

"代谢"诵常被分为两类:

- "分解代谢":可以对大的分子进行分解以获得能量(如细胞呼吸);
- "合成代谢":则可以利用能量来合成细胞中的各个组分,如蛋白质和核酸等。

代谢可以被认为是生物体不断进行物质和能量交换的过程,一旦物质和能量的 交换停止,生物体的结构就会解体。

但内分泌失调, 也是自身免疫性疾病发病率上升, 以及肥胖和"代谢综合征"(一组增加心脏病、中风, 和 "2型糖尿病"风险的疾病)流行的罪魁祸首。其中, 一些生殖影响甚至与"早产死亡"风险增加有关。

It's time for us /to make it a priority 优先事项;最重要的事;首要事情 to demand that /endocrine-disrupting 内分泌干扰物 chemicals in the everyday products /are replaced with chemicals that don't affect our hormones /and don't persist 维持;保持;持续存在 in the environment.

Example 8. 标题

现在是我们优先考虑的时候了,要求将日常产品中干扰内分泌的化学物质,替换为不影响我们的荷尔蒙,目不会在环境中持久存在的化学物质。

2. Reproductive Problems in Both Men and Women Are Rising at an Alarming Rate

The whole spectrum of reproductive problems in males are increasing by about 1 percent per year in Western countries. This "1 percent effect" includes the rates of declining sperm counts, decreasing testosterone levels and increasing rates of testicular cancer, as well as a rise in the prevalence of erectile dysfunction. On the female side of the equation, miscarriage rates are also increasing by about 1 percent per year in the U.S., and so is the rate of gestational surrogacy. Meanwhile, the total fertility rate worldwide has dropped by nearly 1 percent per year from 1960 to 2018.

It is a huge deal! It adds up to more than 10 percent per decade and more than 50 percent over 50 years. When you consider that sperm counts declined by 50 percent in just 40 years, ...

The annual 1 percent decline in reproductive health is faster than the rate of global warming. To put the 1 percent effect in perspective, consider this: scientific data show a 1.1 percent per year increase in the number of children diagnosed with autism spectrum disorder between 2000 and 2016, according to the Centers for Disease Control and Prevention.

They're just too synchronous for that to be possible. The truth is, these reproductive health effects are interconnected, and they are largely driven by a common cause: the presence of hormone-altering chemicals (a.k.a., endocrine-disrupting chemicals, or EDCs) in our world. These hormone-hijacking chemicals, which include phthalates, bisphenol A, and flame retardants, among others, have become ubiquitous in modern life. They're in water bottles and food packaging, electronic devices, personal-care products, cleaning supplies

and many other items we use regularly. And they began being produced in increasing numbers after 1950, when sperm counts and fertility began their decline.

Exposure to these chemicals is especially problematic during pregnancy because what happens during pregnancy doesn't stay in pregnancy. Rather, an expectant mother's exposure to toxic chemicals in the air she breathes, the water she drinks, the foods she eats and the products she slathers on her skin can enter her body (and hence the fetus) and influence her baby's reproductive development. This is particularly true early in pregnancy—in what's called the reproductive programming window—and it's especially true for male babies.

For example, if a woman is exposed to chemicals that block the action of androgens during the first trimester of pregnancy, this can affect the reproductive development of the male fetus in numerous ways. It can result in a shortening of the anogenital distance (AGD), the span from the anus to the base of the penis, which is significant because research has shown that a shorter AGD correlates with a smaller penis and, in the adult, a lower sperm count. In addition, prenatal disruption of the male hormonal system can result in reduced testosterone levels and increase the risk that a baby boy will have undescended testicles (cryptorchidism) or a particular type of malformed penis (hypospadias) at birth. And if a boy is born with these genital defects, he will have an increased risk of low sperm count and testicular cancer as an adult.

But endocrine disruption is also a culprit in rising rates of autoimmune disorders as well as the growing epidemic of obesity and metabolic syndrome (a cluster of conditions that increases the risk of heart disease, stroke and type 2 diabetes). Some of these reproductive effects are even associated with an increased risk of premature death.

It's time for us to make it a priority to demand that endocrine-disrupting chemicals in the everyday products are replaced with chemicals that don't affect our hormones and don't persist in the environment.