

## **ANSWER KEY:**

### **Ex. 1. Adapted from:**

<http://www.brainfacts.org/thinking-sensing-and-behaving/diet-and-lifestyle/2015/sweet-talk-the-brain-and-sugar>

1. Research into sugar has increased due to:

- A) scientific progress in general
- B) false advertising and misleading marketing ploys, leading to overconsumption of sugar
- C) soaring body mass and the ensuing diseases

2. Average American consumes:

- A) 22 teaspoons of sugar total
- B) 22 teaspoons of naturally occurring sugar
- C) 22 teaspoons of sugar on top of what is naturally found in food produce

3. The daily recommended amount of sugar is

- A) equal for any gender
- B) greater for men
- C) greater for women

4. When lab rats consume too much sugar

- A) their brain structure changes
- B) they become addicted to drugs
- C) there are alterations in released neurotransmitters and gene expression

5. When we eat something sweet,

- A) the reward system is activated
- B) taste buds release dopamine
- C) we experience pleasurable sexual desire

6. Artificial sweeteners

- A) can trick the brain into believing we consume real sugar
- B) will be identified by the brain as different
- C) are good for feeding animals

7. Human brain prefers sugar

- A) due to the calorie content it provides
- B) because of the pleasant sweet taste in the mouth
- C) as a result of sensory reaction

8. The main drawback of artificial sweeteners is:

- A) they're inactive physiologically
- B) they don't stimulate neural pathways in the brain
- C) they are sensitive to energy content

9. The sensible way to lose weight is to

- A) replace sugar with artificial sweeteners
- B) reduce sugar consumption
- C) eat only low-calorie food

### **Ex. 2. Adapted from New Proficiency Scott-Barrett**

1. Severed hand / cut off hand
2. Stamina
3. Manual precision / dexterity
4. 70
5. Died / was dead
6. Personality
7. Physical rejection
8. Suppress

9. Infections
10. cancer

**Ex. 3. Adapted from:** <http://www.medicalnewstoday.com/articles/40253.php>

**1 F / 2 C / 3 A / 4 G / 5 E / 6 B**

**Ex. 4.** Adapted from *Guardian*

<https://www.theguardian.com/society/2016/nov/12/sore-throat-test-pharmacists-instead-of-gps-under-nhs-move>

In 2019 sore throat sufferers will visit their pharmacist instead of their GP for an on-the-spot test to see if they need antibiotics 1. **under a new NHS move.** The “sore throat test and treat” program is planned as a walk-in service outside health care providers. 12. **Thus, it could help relieve pressure on family doctors and tackle antibiotic resistance,** according to NHS. NHS has been researching methods to reduce winter deaths triggered by sub-zero weather infections in UK. As a result of research this campaign has been started. It urges people with long-term health conditions and over 65 years of age to take these preventive steps.

The sore throat test and treat service, 11. **which was piloted with 335 patients treated at Boots pharmacies, 10. involves taking a swab test with results provided in five minutes to see if a course of antibiotics is needed.** The initiative could save the health service £35m a year and reduce GP consultations by as many as 800,000 8. **if the scheme is taken up nationwide.** Normally about 1.8 million people visit their GP with sore throat symptoms every year and many a given antibiotics unnecessarily.

There is another issue related to this initiative and it is not just a theoretical threat. Due to **6. antibiotic abuse high antibiotic resistance has developed recently.** On the 61st anniversary of Alexander Fleming’s death, we are virtually on the road back to where he started: the threat of people dying from common infections and injuries is imminent. 5. **The initiative is part of the NHS innovation accelerator scheme,** designed to help with the adoption of new treatments and technologies.

Meanwhile, the mayor of London, Sadiq Khan, has urged 3. **those citizens eligible for pharyngeal tests to take up the national “stay well this winter” campaign by reducing the cycles of antibiotics.** In the long run this type of service will be accessible via all community pharmacies 4. **for GBP 12.00 or under NHS insurance.** By 2050, drug-resistant throat infections are expected to cause 10 million deaths annually – becoming a greater killer than cancer is today. Antimicrobial resistance is also expected to shove over 28 million people into extreme poverty. 2. **Misuse of antibiotics in food animals is a major driver of resistance.** 7. **Farm animals consume about two-thirds of the world’s antibiotics,** with much of this added to water to make animals grow faster. Still, it is predicted to increase by two-thirds soon. In World Antibiotics Awareness Week, we can only call on big meat manufacturers worldwide like KFC, Subway and McDonald’s to end the routine use of all antibiotics in livestock. 9. **Antibiotics should be used again as intended: only when there has been a diagnosis of illness, not for growth promotion or disease prevention.**

1. Family physicians have issued a new recommendation to visit the drug store for consultation in case of sore throat. **F – it is a new NHS move.**
2. Antibiotic resistance starts with unsatisfactory observance of standards in food processing technology. **T - Misuse of antibiotics in food animals is a major driver of resistance**
3. Only certain citizens will need to participate in the program **T - those citizens eligible for pharyngeal tests**
4. The test is done for free. **F – either for GBP 12.00 or under insurance**
5. This project has not been prepared in isolation. **T - The initiative is part of the NHS innovation accelerator scheme.**
6. We are to blame for the situation. **T - due to antibiotic abuse high antibiotic resistance has developed recently**
7. The number of antibiotics used by human beings is substantial compared to other users. **F – Farm animals consume about two-thirds of the world’s antibiotics**
8. The scheme depends on its international availability **F – The initiative could save the health service £35m ... if taken up nationwide.**
9. Antibiotics are used not only to cure infections. **T – Antibiotics should be used again as intended: only when there has been a diagnosis of illness**
10. The initiative seems really cost and time effective **T – it involves taking a swab test with results provided in five minutes to see if a course of antibiotics is needed**
11. The feasibility study needs to be performed, yet. **F – it was piloted with 335 patients**
12. The campaign has a couple of profits **T – Thus, it could help relieve pressure on family doctors and tackle antibiotic resistance**

**Ex. 5.** Source: <https://www.medicalnewstoday.com/articles/320651.php>

Adapted from *Medical News Today*, January, 2018

If you're a woman, you may **1) view** the Pap test as somewhat of an inconvenience, or even a few minutes of terror. This might put you **2) off** from getting tested, but here's why you should stop avoiding it and book an appointment now.

The Pap test, or Pap smear, is so named in **3) honour** of its inventor, a Greek doctor called Georgios Nicholas Papanicolaou (1883–1962). He researched abnormal mutations in the cells of the female reproductive system. His work focused on examining smears of cervical tissue to screen for potential warning signs related to gynecological health.

Through the Pap smear, cells are collected from a woman's cervix for analysis. These are screened for any unusual results, as mutations might be **4) indicative** of the presence of the human papillomavirus (HPV), which is a major risk factor for the development of cervical cancer. HPV is a very common sexually transmitted infection, and it can be **5) contracted** via sexual contact with someone who is already infected. **Most HPV infections 6) resolve on their own** within 2 years, without causing any further health complications. In some cases, however, HPV can **7) linger** in the body, causing genital warts that can, in turn, lead to cervical cancer.

There are several types of treatment and intervention available for cervical cancer, but for these to be most effective, it is crucial to spot it as early as possible. A Pap test can detect cells in their precancerous **8) stage** which can allow the implementation of a preventive treatment. **9) In addition to** detecting precancerous lesions, the test can also help to spot any other issues that may appear in the cervical or vaginal area, such as infections.

The Pap test is performed with the help of a **10) speculum**. This tool allows the practitioner to open up the vaginal canal, so that the cervix can be seen.

A sample of cells is then collected from the cervix with a little brush. This sample-taking procedure is what women are usually most afraid of or embarrassed about. This is a natural reaction, **11) given that** a person you don't know gets to insert a cold and uncomfortable instrument into your vagina and then scrape away at your cervix. As hair-raising as that might sound, most **12) accounts** of undergoing the Pap smear speak of some discomfort, but definitely nothing like the horrors that some of us may imagine.

When I asked my female colleagues about their experiences on the ob-gyn exam table, the stories they shared spoke of **13) bearing** a little discomfort for a couple of minutes, and gaining much larger health benefits in the long run. One colleague said: "I've been having Pap tests since my early 20s, and I'm so glad I did. I had some abnormal cells that had to be removed. I fear that if I hadn't had the test early, these cells could have become cancerous. In terms of discomfort, I don't think it's as uncomfortable as some women perceive it to be, and it's over so quickly." Another colleague — while admitting that she "can't say that she looks forward **14) to having** a Pap test" — certainly thought that the benefits "outweigh the short period of discomfort that they cause," as the test can identify a problem even when you don't experience any symptoms. Don't **15) dread** the ob-gyn exam table as the examination itself might save you more trouble than you know. "On one occasion," she explained, "my ob-gyn found a small patch of infection on my cervix, even though I hadn't felt any discomfort. She **16) nipped** it in the bud, it was really worth it."

After the cell sample is collected, it is sent over to the laboratory for analysis. The conventional way of transferring the tissue sample directly onto a glass slide has largely been replaced by liquid-based cytology testing. This method requires transferring the cells into a liquid vial where, compared to a glass slide, a sample is more effectively **17) preserved**. This will also reduce the possibility of a woman having to retake the test so the practitioner can obtain better samples.

Following current guidelines, women should start getting tested from the age of 21.

Women aged between 21 and 30 should get the Pap test done once every 3 years if no points of concern are **18) raised**, and women between 30 and 65 could get tested once every 5 years. Women over 30 years old can also get a separate HPV test done **19) alongside** their Pap smear. This is a DNA test dedicated **20) to identifying** HPV 16 and HPV 18, two high-risk types of the virus that are usually responsible for the development of cervical cancer.

All women are **21) at** risk of cervical cancer. The main risk factor for this type of cancer is persistent infection with high-risk strains of HPV. Most women and men who have been sexually active have been exposed **22) to** the HPV virus, however certain types of sexual behaviour increase a woman's risk of getting an HPV infection, e.g. having sex at an early age, having many sexual partners and having unprotected sex at any age.

Other common risk factors for cervical cancer include: smoking cigarettes, long-term use of contraceptive pills, having given birth to many children, a diet low in fruits and vegetables, obesity, a **23) compromised** immune system (your body does not have the ability to defend against illnesses), and a family history of this type of cancer.

So ladies, don't **24) postpone** your Pap smears any longer; they won't be the most pleasant experience, but who cares — as long as they help us to go forward in good health and with confidence.

Nie liczymy punktu 6 – tak więc Olimpiada jest na 99 punktów a nie na 100

### Ex. 6. Adapted from:

<http://www.dailymail.co.uk/sciencetech/article-3559114/Is-happiness-DNA-Study-finds-genes-affect-mood-prone-depression-neuroticism.html>

Is happiness in your DNA?

Study finds the genes that affect mood and **why** some of us are prone **to** depression and neuroticism.

For the first time in history, researchers have isolated the parts of the human genome that could explain the differences in **how** humans experience happiness.

These findings are **from** a large-scale international study conducted by VU Amsterdam professors Bartels and Koellinger. In collaboration with scientists in 17 countries, they studied the phenotypes in the DNA of more than 300,000 people. Phenotypes are traits that emerge as a result of nature and nurture. The researchers asked the participants to discuss **how** happy they feel about their life, **if** they've ever had depression or signs of neurotic behaviour.

The results additionally looked **into** physical traits that can have an impact on mood, including smoking and body mass index. These revealed that subjective wellbeing and depression are influenced by the same set of genes expressed in the nervous system and adrenal glands. Genes in tissues were also found to influence wellbeing. However, the researchers added that **the/these/those** three variants only account for a small fraction of the differences between people.

This research builds on a previous study which found that the **more** people in a country who have a particular gene, the happier the nation will be. The DNA **in** question, the FAAH gene, makes a protein that affects feelings of pleasure and pain. People **with/having** a particular version of it tend to be cheerier souls. **However/nevertheless/nonetheless/still/yet**, wealth and health were found to have little effect on happiness.

The team from Hong Kong looked at **whether** there was a link between levels of the FAAH gene in a population and number of people who said they were 'very happy' in global study of life satisfaction.

Prof. Bartels explained: 'This study is **both/undoubtedly/truly** a milestone and a new beginning. 'A milestone because we are now certain that there is a genetic aspect to happiness and a new beginning because **the/all/these/those** three variants that we know are involved account for only a small fraction of the differences between human beings.

### Ex. 7

1) diagnostician	11) fabricated
2) minimises	12) manageability/management
3) developmental	13) resolving
4) anti-inflammatory	14) traumatised/traumatized
5) occlusal	15) carvable
6) apprehensive	16) non-allergenic
7) irritation	17) disagreeable
8) prevails/prevalled	18) custom/customised/customized/custom-made
9) uncomfortably	19) uneventful
10) illegal	20) standardised
	21) osseointegration
	22) perineural
	23) cessation
	24) haemorrhagic/hemorrhagic