

In the mid-1970s, the public of the Western world was astonished to learn that scientists had recently invented ways to move pieces of genetic material, the very blueprint of life, from one species to another. Boosters claimed that this new technology of moving and changing genes, which came to be called genetic engineering, would lead to more abundant food supplies, inexpensive medicines, and cures for currently untreatable diseases. Naysayers, on the other hand, feared that it would lead to unstoppable plagues of disease or other environmental disasters. Supporters and opponents of genetic engineering were just as divided about the basic ethics or morality of the technology as they were about its practical implications. Supporters said it was nothing more than an extension of what breeders of plants and animals had been doing for thousands of years and, indeed, what nature itself did through evolution and natural selection, while to detractors it was "unnatural" and "playing God" and therefore should be banned on ethical as well as safety grounds. Opponents still question the basic ethics of modifying genes, both because the process creates living things that would never exist in nature and turn beings as mere manufactured commodities to be changed and discarded at will.

1. We understand from the paragraph that proponents of genetic engineering claimed that ----.

- A) practices should be applied on animals rather than humans
- B) studies should be confined to medicine and agriculture
- C) beings were not commodities to be sold and purchased without will
- D) safety was the main issue why the technology could be abused
- E) with the technology, several benefits could be gained in various fields

2. In the passage it is said that with the introduction of genetic engineering ----.

- A) a new era in science and human life began in that the technology changed the world
- B) ethical concerns were raised about the application of genetic modification of species
- C) scientists did not apply their studies on humans immediately
- D) the technology threatened the well-being of some species, while protecting others
- E) the issue became to be known as playing God

3. We learn from the passage that as far as the opponents were concerned ----.

- A) genetic engineering of species was neither ethical nor safe
- B) species have already evolved via natural selection, so genetic modification is futile
- C) once a species' genetic make-up is altered, the others are in jeopardy
- D) plant and animal breeders had been applying similar practices
- E) the technology did not provide time for other species to get adapted to genetic engineering

4. We are given information in the passage that ----.

- A) with genetic engineering there is much more profit than loss
- B) from a scientific perspective, genetic engineering is not unethical
- C) the controversy over genetic engineering still prevails
- D) without the technology in the field, we may not keep up with the soaring demand
- E) genetically modified species are an explicit threat to humans



By 2050, the world will host nine billion people - and that's if population growth slows in much of the developing world. Today, at least one billion people are chronically malnourished or starving. Simply to maintain that sad state of affairs would require the clearing of 900 million additional hectares of land. The bad news beyond the impacts on people, plants and animals of that kind of deforestation is that there isn't that much land available. At most, we might be able to add 100 million hectares to the 4.3 billion already under cultivation worldwide. In addition, agriculture accounts for at least 85 percent of human water consumption - a growing concern as aquifers diminish and hydrology changes in the face of climate change. And, humans now use some 171 million tons of nitrogen as fertilizer every year, much of which ends up polluting lakes, rivers, streams and even the ocean. And it's not likely that so-called organic agriculture is helping with that: Nitrate leaching into waterways can come from manure, as in the Netherlands or overuse of fertilizer, as in Iowa. The result is the same: dead zones.

1. In the passage, it is said that agriculture ---.

- A) is in severe need of water which could not be met by farmers
- B) is the only way that we can feed the growing population of the earth
- C) has significant impacts on ecology by exploiting fresh water resources
- D) has nothing to do with the use of fertilizers and thus should proceed as it is
- E) has to be industrialized in order to fertilize land and increase crop yields

2. We understand from the paragraph that the writer ----.

- A) calls for more reliable agricultural methods instead of the ones that are applied
- B) acknowledges the fact that we are exploiting resources on earth, but appreciates it as inevitable
- C) mainly centers on how to tackle with the annually growing population
- D) points out that nitrate use in agriculture should be ceased as soon as possible
- E) believes that available land for cultivation has its limits

3. We can infer from the passage that ----.

- A) 100 million hectares of land are added to the agricultural cultivation each year
- B) the amount of arable lands may not be sufficient for future generations
- C) population growth and deforestation are slightly related
- D) lakes and rivers are the least effected water resources from industrial fertilization
- E) the world has reached a point where it can no more feed its inhabitants

4. It is made clear in the passage that malnutrition and starvation ---.

- A) may become the concerns of the coming decades unless we produce more food to feed people
- B) have never become so critical throughout the dawn of man
- C) are to be blamed for the overuse fertilizers and other industrial chemicals in agriculture
- D) are the natural outcomes of agricultural areas known as the dead zones
- E) are likely to add up in the coming decades due to the scarcity of arable lands



Some say "you are what you eat", but it also seems that we are also what we drink. Could seemingly innocent soft drinks have impact on a child's behavior? Americans buy more soft drinks per capita than people in any other country. These drinks are consumed by individuals of all ages, including very young children. Although soft drink consumption is associated with aggression, depression, and suicidal thoughts in adolescents, the relationship had not been evaluated in younger children. A new study by Shakira Suglia, ScD, and her colleagues, has found that aggression, attention problems, and withdrawal behavior are all associated with soft drink consumption in young children. Even after adjusting for socio-demographic factors, maternal depression, intimate partner violence, and paternal incarceration, any soft drink consumption was associated with increased aggressive behavior. Children who drank 4 or more soft drinks per day were more than twice as likely to destroy things belonging to others, get into fights, and physically attack people. They also increased attention problems and withdrawal behavior compared with those who did not consume soft drinks. According to Dr. Suglia, "We found that the child's aggressive behavior score increased with every increase in soft drinks servings per day." Although this study cannot identify the exact nature of the association between soft drink consumption and problem behaviors, limiting or eliminating a child's soft drink consumption may reduce behavioral problems.

1. According to the passage as a recent study finds, ----.

- A) the more soft drinks you consume, the more addicted you get
- B) children who were less exposed to soft drinks were less inclined to show aggressive behavior
- C) a child's diet could be to blame as the prime suspect of his misbehavior
- D) children in the USA consume as much soft drink as those in any other country
- E) socio-demographic factors play a significant role in why people consume soft drinks

2. With the phrase "you are what you eat and drink, it is meant that ----.

- A) our behavior depends on our nutritional habit
- B) excessive consumption of food may threaten your somatic well-being
- C) the ingredients in the food that we consume have considerable effects on our body
- D) adolescents must be monitored precisely lest they become trapped by abusive substances
- E) consuming soft drinks and food are two distinct concepts

3. We understand from the passage that ----.

- A) attention problems and withdrawal behavior are the direct results of soft drink consumption
- B) the writer is not in line with what Dr. Suglia claims about soft drinks
- C) despite noteworthy outcomes, the study of Dr. Suglia does not provide conclusive evidence on the association of what we eat and how we behave
- D) increased attention problems are occasionally seen among children of all ages
- E) children should never have soft drinks in their diet at all

4. As we learn from the passage, Shakira Suglia and her team ----.

- A) were stunned to find out that their research would make so much appeal
- B) studied a topic in terms of another age group which was previously disregarded
- C) identified what led to aggressive behavior in children
- D) advised what measures to be taken against the excessive soft drink consumption
- E) devised methods for evaluating deficiencies in children