



We Are the One!

Let's explore global issues around the world and learn how to clearly express my opinions! Also, let's consider what I can do as a global citizen to protect the Earth and promote world peace!

Course Title	<i>Online Debate</i>
Course Duration	Aug 1, 2024 to Oct 4, 2024 <i>*no class on June 6th due to Memorial Day</i>
Class Date	August 8, 2024
Textbook	<i>Printouts</i> *Course Materials Link: https://jejuhec.moe.go.kr/distance/data.php

Course Guidelines

1. 수업자료는 다음 경로에서 다운로드 가능
: 글로벌역량지원센터 홈페이지(jejuhec.moe.go.kr) 접속 > “글로벌 원격 연수” 클릭 > “교육 자료실” 클릭
*링크: <https://jejuhec.moe.go.kr/distance/data.php>
*업데이트 날짜: 수업 전날 오후 6시 이후
2. 이수증 발급 기준: (1) 출석률 70% 이상 (2) 사전/사후 평가 완료
* 두 가지 조건을 만족해야 이수증 발급 가능.
3. 이수증 발급 방법: 교육자료실 공지 확인 및 9주차 수업 때 안내 예정

Warm-Up: Structure

: Let's learn about how to structure my thoughts clearly to make my arguments more persuasive and understandable!

Claim - Reasons - Conclusion

1. Claim : Start by clearly saying what you believe or what you're arguing for.
2. Reasons: Give a few good reasons why you think your claim is true. Make sure each reason is different and explain them with examples or facts.
3. Conclusion: Wrap up your argument by repeating your main idea and the strongest points you made.

Commonly Used Expressions

1. Claim

- a. I firmly believe that... 저는 ...라고 굳게 믿습니다.
- b. I'm pretty certain that... 저는 ...라고 꽤 확신합니다.
- c. It looks to me like... 제게는 ...처럼 보입니다.
- d. As far as I'm concerned... 제게 있어서는...
- e. I have no doubt that... 저는 ...라는 데 의심의 여지가 없습니다.
- f. From what I can tell... 제가 알기로는... / 제가 보기에는...

2. Reasons

- a. The primary reason for this is... 주된 이유는 ...입니다.
- b. One of the main reasons is that... 주요 이유 중 하나는 ...입니다.
- c. Another thing is that... 또 다른 점은 ...입니다.
- d. This is largely because... 이는 주로 ... 때문입니다.
- e. Moreover, it is important to note that... 게다가, ...을 주목하는 것이 중요합니다.
- f. Additionally, it should be considered that... 또한, ...을 고려해야 합니다.
- g. On top of that... 그뿐만 아니라...

3. Conclusion

- a. To conclude, it is evident that... 결론적으로, ...은 분명합니다.
- b. Taking everything into account... 모든 것을 감안할 때...
- c. Ultimately, it can be said that... 궁극적으로, ...라고 말할 수 있습니다.
- d. To bring it all together... 모든 것을 종합하면...
- e. To wrap things up... 마무리하자면...
- f. Bottom line is... 요컨대...

4. Time-Filling Expressions

- a. Well, let me think... 음, 생각해보자면...
- b. Hmm, that's a good question... 흠, 좋은 질문이네요...
- c. How should I put this... 어떻게 말해야 할까...
- d. That's a tough one... 그건 어려운 질문이네요...
- e. If I had to guess... 굳이 말하자면...
- f. Off the top of my head... 지금 당장 떠오르는 건...

g. Let me think for a second... 잠깐 생각해볼게요...

Today's issues...

: Should there be limits to forever chemicals in our drinking water?

*source: CNN10, April 11, 2024

Vocabularies

1. administration - 행정부, 관리
2. national - 국가의, 전국적인
3. standard - 기준, 표준
4. chemicals - 화학물질
5. spell out - 상세히 설명하다, 철자를 말하다
6. be linked to - ~와 관련되다
7. thyroid - 갑상선
8. reproductive - 생식의, 번식의
9. liver - 간
10. regulation - 규제, 규정
11. exposure - 노출
12. water treatment facility - 수처리 시설
13. implement - 실행하다, 이행하다
14. filter out - 걸러내다
15. set aside - 따로 떼어두다, 확보하다
16. substance - 물질

1. synthetic - 합성의
2. repel - 물리치다, 격퇴하다
3. stain resistant - 얼룩 방지의
4. non-stick - 들러붙지 않는
5. dental floss - 치실
6. decade - 10년
7. breakneck - 매우 빠른, 맹렬한
8. break down - 분해하다
9. completely - 완전히
10. property - 속성, 특성
11. durable - 내구성이 있는, 오래가는
12. get rid of - 제거하다
13. accumulate - 축적하다
14. estimate - 추정하다
15. on a basis - ~을 기반으로, ~을 기초로 하여
16. reverse osmosis - 역삼투

Dictations

The Biden administration has set the first ever national standard to _____ forever _____ in our drinking water. These chemicals are officially known as PFAS, spelled out PFAS. A government study found they`re present in nearly half of the United States _____. These forever chemicals can stick around in our environment and in our bodies. They are linked to a variety of health problems that include cancer, thyroid disease, reproductive problems, and heart and liver damage. The CDC says these chemicals can be found in the blood of nearly 97 percent of Americans. This regulation is designed to _____ to these chemicals for about 100 million people across the United States. The plan targets five specific types of chemicals and sets strict limits for them. Water _____ have three years to start testing, and another two years to implement technology to filter out these chemicals. The federal government has _____ a billion dollars to do it. So what does this all mean for you and me? CNN`s Dr. Sanjay Gupta has more.

(BEGIN VIDEOTAPE)

DR. SANJAY GUPTA, CNN CHIEF MEDICAL CORRESPONDENT: You may have never heard of PFAS, but you`re likely to have these _____ inside your body. Perfluoroalkyl and polyfluoroalkyl are substances that are known as forever chemicals. These synthetic chemicals were developed in the 1940s that are used to repel oil and water. They make consumer items non-stick and waterproof, stain resistant, and they`re found in many products you likely use. It`s not obvious, non-stick cookware, waterproof clothing, but also in things you may not necessarily realize, dental floss, pizza boxes, microwave popcorn bags, even makeup and sunscreen.

Now over the last several decades, these chemicals have been developed at this breakneck pace with now more than a 9,000 PFAS related chemicals to date. And again, they`re called forever chemicals because they don`t _____, meaning the same properties that make these chemicals so durable also make them extremely hard to get rid of, meaning they _____ in the environment, in animals, and yes, they accumulate in us, humans. Thousands of communities across the United States have drinking water that is _____ with PFAS and as a result, more than 200 million Americans could have toxic PFAS in their drinking water, according to the Environmental Working Group. And here`s the thing: nearly all people have measurable level of PFAS in their bodies. In fact, it`s estimated that 98 percent of the U.S. population has some level of PFAS contamination and individuals exposed on a regular basis to chemicals _____ cumulatively. I want to be clear. These are relatively early days, and we still don`t fully understand the extent of the threat posed by these chemicals. PFAS have been linked to cancer and kidney and liver damage and other serious health problems and people with prolonged exposure. As for reversing, the damage that has already been done, large treatment is expensive at scale. It`s even harder, if not impossible, to remove PFAS from soil or the environment.

But here`s what you can do until a cheaper, more effective solution is found. You can avoid stain and water _____ products and sprays. If you order delivery or take out the

restaurants, remove your food for _____ before reheating. In cooking at home, steer clear of non-stick cookware and filter your drinking water with activated carbon or reverse osmosis, if possible.

Passage

The Biden administration has set the first ever national standard to limit forever chemicals in our drinking water. These chemicals are officially known as PFAS, spelled out PFAS. A government study found they're present in nearly half of the United States drinking water. These forever chemicals can stick around in our environment and in our bodies. They are linked to a variety of health problems that include cancer, thyroid disease, reproductive problems, and heart and liver damage. The CDC says these chemicals can be found in the blood of nearly 97 percent of Americans. This regulation is designed to reduce exposure to these chemicals for about 100 million people across the United States. The plan targets five specific types of chemicals and sets strict limits for them. Water treatment facilities have three years to start testing, and another two years to implement technology to filter out these chemicals. The federal government has set aside a billion dollars to do it. So what does this all mean for you and me? CNN's Dr. Sanjay Gupta has more.

(BEGIN VIDEOTAPE)

DR. SANJAY GUPTA, CNN CHIEF MEDICAL CORRESPONDENT: You may have never heard of PFAS, but you're likely to have these potentially dangerous chemicals inside your body. Perfluoroalkyl and polyfluoroalkyl are substances that are known as forever chemicals. These synthetic chemicals were developed in the 1940s that are used to repel oil and water. They make consumer items non-stick and waterproof, stain resistant, and they're found in many products you likely use. It's not obvious, non-stick cookware, waterproof clothing, but also in things you may not necessarily realize, dental floss, pizza boxes, microwave popcorn bags, even makeup and sunscreen.

Now over the last several decades, these chemicals have been developed at this breakneck pace with now more than a 9,000 PFAS related chemicals to date. And again, they're called forever chemicals because they don't break down completely, meaning the same properties that make these chemicals so durable also make them extremely hard to get rid of, meaning they accumulate in the environment, in animals, and yes, they accumulate in us, humans. Thousands of communities across the United States have drinking water that is contaminated with PFAS and as a result, more than 200 million Americans could have toxic PFAS in their drinking water, according to the Environmental Working Group. And here's the thing: nearly all people have measurable level of PFAS in their bodies. In fact, it's estimated that 98 percent of the U.S. population has some level of PFAS contamination and individuals exposed on a regular basis to chemicals build up cumulatively. I want to be clear. These are relatively early days, and we still don't fully understand the extent of the threat posed by these chemicals. PFAS have been linked to cancer and kidney and liver damage and other serious health problems and people with prolonged exposure. As for reversing, the damage that has already been done, large treatment is expensive at scale. It's even harder, if not impossible, to remove PFAS from soil or the environment.

But here's what you can do until a cheaper, more effective solution is found. You can avoid stain and water resistant products and sprays. If you order delivery or take out the restaurants, remove your food for takeout containers before reheating. In cooking at home, steer clear of non-stick cookware and filter your drinking water with activated carbon or reverse osmosis, if possible.

Passage (Korean ver.)

바이든 행정부는 미국의 식수에서 '영원한 화학물질'을 제한하기 위한 첫 번째 국가 표준을 설정했습니다. 이 화학물질은 공식적으로 PFAS로 알려져 있습니다. 정부 연구에 따르면, 미국의 거의 절반의 식수에 이러한 화학물질이 존재한다고 합니다. 이 영원한 화학물질은 환경과 우리 몸에 오랫동안 남아 있을 수 있으며, 암, 갑상선 질환, 생식 문제, 심장 및 간 손상 등 다양한 건강 문제와 관련이 있습니다. CDC에 따르면, 거의 97%의 미국인 혈액에서 이러한 화학물질이 발견될 수 있다고 합니다. 이 규제는 약 1억 명의 미국인들이 이러한 화학물질에 대한 노출을 줄이기 위해 설계되었습니다. 이 계획은 다섯 가지 특정 유형의 화학물질을 대상으로 하여 엄격한 한도를 설정합니다. 수처리 시설은 3년 내에 테스트를 시작하고, 추가 2년 내에 이러한 화학물질을 걸러내는 기술을 구현해야 합니다. 연방 정부는 이를 위해 10억 달러를 할당했습니다. 그렇다면 이 모든 것이 우리에게 어떤 의미가 있을까요? CNN의 Dr. Sanjay Gupta가 더 자세하게 설명합니다.

(비디오 시작)

Dr. Sanjay Gupta, CNN 수석 의학 특파원: 여러분은 PFAS에 대해 들어본 적이 없을 수도 있지만, 여러분의 몸 안에 이 잠재적으로 위험한 화학물질이 있을 가능성이 큼니다. 퍼플루오로알킬 및 폴리플루오로알킬 물질은 영원한 화학물질로 알려져 있습니다. 이 합성 화학물질은 1940년대에 개발되어 기름과 물을 반발시키는 데 사용되었습니다. 소비자 물품을 비점착성 및 방수, 얼룩 방지 기능을 갖추게 하며, 여러분이 사용하고 있는 많은 제품에 존재합니다. 눈에 띄지 않지만, 비점착성 조리기구, 방수 의류뿐만 아니라 치실, 피자 상자, 전자레인지 팝콘 봉지, 심지어 화장품과 자외선 차단제에도 들어 있습니다.

지난 몇 십 년 동안 이러한 화학물질은 급속도로 개발되어 현재 9,000개 이상의 PFAS 관련 화학물질이 존재합니다. 그리고 다시 말하지만, 이들은 영원한 화학물질이라고 불리며, 완전히 분해되지 않기 때문에 매우 제거하기 어렵습니다. 즉, 환경, 동물, 그리고 우리 인간에게 축적된다는 것입니다. 미국 전역의 수천 개의 커뮤니티가 PFAS로 오염된 식수를 가지고 있으며, 그 결과로 2억 명 이상의 미국인이 식수에서 유독한 PFAS에 노출될 수 있습니다.

그리고 중요한 점은 거의 모든 사람이 몸 안에 PFAS의 측정 가능한 수준을 가지고 있다는 것입니다. 실제로, 미국 인구의 98%가 어느 정도의 PFAS 오염을 가지고 있으며, 정기적으로 화학물질에 노출된 개인은 누적적으로 쌓이게 됩니다. 초기 단계이기 때문에 이러한 화학물질이 초래하는 위협의 정도를 완전히 이해하지 못하고 있습니다. PFAS는 암, 신장 및 간 손상, 그리고 다른 심각한 건강 문제와 관련이 있습니다. 이미 발생한 손상을 되돌리는 것은 대규모로 치료하는 것이 비용이 많이 들며, 토양이나 환경에서 PFAS를 제거하는 것은 더 어렵거나 불가능할 수도 있습니다.

하지만 더 저렴하고 효과적인 해결책이 발견될 때까지 여러분이 할 수 있는 일은 있습니다. 얼룩 및 방수 제품과 스프레이를 피하고, 음식 배달이나 테이크아웃을 할 때는 음식 용기에서 음식을 꺼내서 다시 데우십시오. 집에서 요리할 때는 비점착성 조리기구를 피하고, 가능하면 활성탄이나 역삼투를 이용하여 식수를 필터링하십시오.

Debate

1. Why is it important to regulate the presence of chemicals like PFAS in drinking water?

Sample Answer 1.

[Claim] I firmly believe that regulating the presence of chemicals like PFAS in drinking water is crucial for public health and safety.

[Reason 1] The primary reason for this is that PFAS chemicals have been linked to various serious health issues, including cancer, liver damage, and immune system disorders.

[Reason 2] Moreover, it is important to note that PFAS are known as "forever chemicals" because they do not break down in the environment, leading to long-term contamination of water sources and the broader ecosystem.

[Conclusion] To conclude, it is evident that strict regulation of PFAS in drinking water is essential to protect both human health and the environment from the harmful effects of these persistent chemicals.

2. Do you agree or disagree that individuals can significantly reduce their exposure to PFAS by changing their consumer habits?

Sample Answer 1.

[Claim] As far as I'm concerned, individuals can significantly reduce their exposure to PFAS by changing their consumer habits.

[Reason 1] One of the main reasons is that PFAS are commonly found in everyday products like non-stick cookware, water-resistant clothing, and certain food packaging. By avoiding these products, individuals can decrease their exposure.

[Reason 2] Additionally, it should be considered that choosing products labeled as PFAS-free and supporting companies that commit to sustainable practices can further minimize the presence of these harmful chemicals in our daily lives.

[Conclusion] Ultimately, it can be said that by making informed choices and changing consumer habits, individuals can play a significant role in reducing their exposure to PFAS and encouraging broader environmental sustainability.

3. What steps can be taken through technology and government actions to enhance global water quality?

Sample Answer

[Claim] From what I can tell, enhancing global water quality requires a combination of advanced technology and proactive government actions.

[Reason 1] The primary reason for this is that modern water purification technologies, such as advanced filtration systems and chemical-free treatment methods, can effectively remove contaminants from water sources, ensuring safer drinking water.

[Reason 2] Another thing is that governments can implement stricter regulations and provide funding for water infrastructure projects, ensuring that clean water is accessible to all communities, particularly in underserved areas.

[Conclusion] To wrap things up, a coordinated effort involving cutting-edge technology and robust government policies is essential to improve global water quality and provide safe, clean water for everyone.