



ANALYSIS 과일 과소비가 인지 뇌에 미치는 부정적인 영향



Negative effect of fruit overconsumption on the cognitive brain

[1] What consequences of eating too many grapes and other sweet fruit could there possibly be for our brains?

[2] A few large studies have helped to shed some light.

[3] In one, higher fruit intake in older, cognitively healthy adults was linked with less volume in the hippocampus.

[4] This finding was unusual, since people who eat more fruit usually display the benefits associated with a healthy diet.

[5] In this study, however, the researchers isolated various components of the subjects' diets and found that fruit didn't seem to be doing their memory centers any favors.

[6] Another study from the Mayo Clinic saw a similar inverse relationship between fruit intake and volume of the cortex, the large outer layer of the brain.

[7] Researchers in the latter study noted that excessive consumption of high-sugar fruit (such as mangoes, bananas, and pineapples) may cause metabolic and cognitive problems as much as processed carbs do.



01편 요리 감소의 결과 - 좋은 점과 나쁜 점.



Consequences of Declining Cooking - Good and Bad.

[1] If cooking is as central to human identity, biology, and culture as the biological anthropologist Richard Wrangham suggests, it stands to reason that the decline of cooking in our time would have serious consequences for modern life, and so it has.

[2] Are they all bad? Not at all.

[3] The outsourcing of much of the work of cooking to corporations has relieved women of what has traditionally been their exclusive responsibility for feeding the family, making it easier for them to work outside the home and have careers.

[4] It has headed off many of the domestic conflicts that such a large shift in gender roles and family dynamics was bound to spark.

[5] It has relieved other pressures in the household, including longer workdays and overscheduled children, and saved us time that we can now invest in other pursuits.

[6] It has also allowed us to diversify our diets substantially, making it possible even for people with no cooking skills and little money to enjoy a whole different cuisine.

[7] All that's required is a microwave.



02편 보편적 상상력을 통한 학문의 연결



Connecting Disciplines Through Universal Imagination

[1] Education must focus on the trunk of the tree of knowledge, revealing the ways in which the branches, twigs, and leaves all emerge from a common core.

[2] Tools for thinking stem from this core, providing a common language with which practitioners in different fields may share their experience of the process of innovation and discover links between their creative activities.

[3] When the same terms are employed across the curriculum, students begin to link different subjects and classes.

[4] If they practice abstracting in writing class, if they work on abstracting in painting or drawing class, and if, in all cases, they call it abstracting, they begin to understand how to think beyond disciplinary boundaries.

[5] They see how to transform their thoughts from one mode of conception and expression to another.

[6] Linking the disciplines comes naturally when the terms and tools are presented as part of a universal imagination.



03편 전쟁에서 소리와 움직임을 이용하는 이점



Benefits of utilizing sound and motion in warfare

- [1] Native Americans often sang and danced in preparation for launching an attack.
- [2] The emotional and neurochemical excitement that resulted from this preparatory singing gave them stamina to carry out their attacks.
- [3] What may have begun as an unconscious, uncontrolled act — rushing their victims with singing and beating drums in a frenzy — could have become a strategy as the victors saw firsthand the effect their actions had on those they were attacking.
- [4] Although war dances risk warning an enemy of an upcoming attack, the arousal and synchronizing benefits for the attackers may compensate for the loss of surprise.
- [5] Humans who sang, danced, and marched may have enjoyed a strong advantage on the battlefield as well as intimidated enemies who witnessed such a spectacle.
- [6] Nineteenth—and twentieth—century Germans feared no one more than the Scots — the bagpipes and drums were disturbing in their sheer loudness and visual spectacle.



04편 학습 과정에서 잠의 역할



The role of sleep in the learning process

[1] We have already seen that learning is much more efficient when done at regular intervals: rather than cramming an entire lesson into one day, we are better off spreading out the learning.

[2] The reason is simple: every night, our brain consolidates what it has learned during the day.

[3] This is one of the most important neuroscience discoveries of the last thirty years: sleep is not just a period of inactivity or a garbage collection of the waste products that the brain accumulated while we were awake.

[4] Quite the contrary: while we sleep, our brain remains active; it runs a specific algorithm that replays the important events it recorded during the previous day and gradually transfers them into a more efficient compartment of our memory.



05편 삶에 만족감을 주는 놀라움



A life-satisfying surprise

[1] In the movie Groundhog Day, a weatherman played by Bill Murray is forced to relive a single day over and over again.

[2] Confronted with this seemingly endless loop, he eventually rebels against living through the same day the same way twice.

[3] He learns French, becomes a great pianist, befriends his neighbors, helps the poor.

[4] Why do we cheer him on?

[5] Because we don't want perfect predictability, even if what's on repeat is appealing.

[6] Surprise engages us.

[7] It allows us to escape autopilot.

[8] It keeps us awake to our experience.

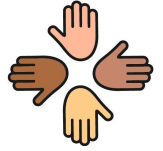
[9] In fact, the neurotransmitter systems involved in reward are tied to the level of surprise:

[10] rewards delivered at regular, predictable times yield a lot less activity in the brain than the same rewards delivered at random unpredictable times.

[11] Surprise gratifies.



06편 생물학적 구성물로서의 인종



Race as a Biological Composition

[1] Individual human beings differ from one another physically in a multitude of visible and invisible ways.

[2] If races — as most people define them — are real biological entities, then people of African ancestry would share a wide variety of traits while people of European ancestry would share a wide variety of different traits.

[3] But once we add traits that are less visible than skin coloration, hair texture, and the like, we find that the people we identify as "the same race" are less and less like one another and more and more like people we identify as "different races."

[4] Add to this point that the physical features used to identify a person as a representative of some race (e.g. skin coloration) are continuously variable, so that one cannot say where "brown skin" becomes "white skin."

[5] Although the physical differences themselves are real, the way we use physical differences to classify people into discrete races is a cultural construction.



07번 눈꺼풀의 속도가 나타내는 정보



Information on the speed of the eyelid

- [1] Shutter speed refers to the speed of a camera shutter.
- [2] In behavior profiling, it refers to the speed of the eyelid.
- [3] When we blink, we reveal more than just blink rate.
- [4] Changes in the speed of the eyelid can indicate important information; shutter speed is a measurement of fear.
- [5] Think of an animal that has a reputation for being fearful.
- [6] A Chihuahua might come to mind.
- [7] In mammals, because of evolution, our eyelids will speed up to minimize the amount of time that we can't see an approaching predator.
- [8] The greater the degree of fear an animal is experiencing, the more the animal is concerned with an approaching predator.
- [9] In an attempt to keep the eyes open as much as possible, the eyelids involuntarily speed up.
- [10] Speed, when it comes to behavior, almost always equals fear.
- [11] In humans, if we experience fear about something, our eyelids will do the same thing as the Chihuahua; they will close and open more quickly.



08편 해양 동물의 무분별한 도입으로 인한 영향



Effects of the indiscriminate introduction of marine animals

[1] Many marine species including oysters, marsh grasses, and fish were deliberately introduced for food or for erosion control, with little knowledge of the impacts they could have.

[2] Fish and shellfish have been intentionally introduced all over the world for aquaculture, providing food and jobs, but they can escape and become a threat to native species, ecosystem function, or livelihoods.

[3] Atlantic salmon are reared in ocean net-pens in Washington State and British Columbia.

[4] Many escape each year, and they have been recovered in both saltwater and freshwater in Washington State, British Columbia, and Alaska.

[5] Recreational fishing can also spread invasive species.

[6] Bait worms from Maine are popular throughout the country.

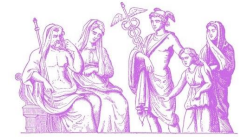
[7] They are commonly packed in seaweed which contains many other organisms.

[8] If the seaweed is discarded, it or the organisms on it can colonize new areas.

[9] Fishing boots, recreational boats, and trailers can pick up organisms at one location and move them elsewhere.



09편 창의성에 대한 근대 이전의 견해



A pre-modern view of creativity

[1] Before the modern scientific era, creativity was attributed to a superhuman force; all novel ideas originated with the gods.

[2] After all, how could a person create something that did not exist before the divine act of creation?

[3] In fact, the Latin meaning of the verb "inspire" is "to breathe into," reflecting the belief that creative inspiration was similar to the moment in creation when God first breathed life into man.

[4] Plato argued that the poet was possessed by divine inspiration, and Plotin wrote that art could only be beautiful if it descended from God.

[5] The artist's job was not to imitate nature but rather to reveal the sacred and transcendent qualities of nature.

[6] Art could only be a pale imitation of the perfection of the world of ideas.

[7] Greek artists did not blindly imitate what they saw in reality; instead they tried to represent the pure, true forms underlying reality, resulting in a sort of compromise between abstraction and accuracy.



10편 원을 그리며 길을 걷는 원인



The cause of walking in a circle

[1] I was brought up to believe that if I get lost in a large forest, I will sooner or later end up where I started.

[2] Without knowing it, people who are lost will always walk in a circle.

[3] In the book Finding Your Way Without Map or Compass, author Harold Gatty confirms that this is true.

[4] We tend to walk in circles for several reasons.

[5] The most important is that virtually no human has two legs of the exact same length.

[6] One leg is always slightly longer than the other, and this causes us to turn without even noticing it.

[7] In addition, if you are hiking with a backpack on, the weight of that backpack will inevitably throw you off balance.

[8] Our dominant hand factors into the mix too.

[9] If you are right-handed, you will have a tendency to turn toward the right.

[10] And when you meet an obstacle, you will subconsciously decide to pass it on the right side.



10번 문화를 이해하는 도구로서의 유머



Humor as a tool for understanding culture

- [1] It has long been held that the capacity for laughter is a peculiarly human characteristic.
- [2] The witty Lucian of Samosata (2nd century A.D.) noted that the way to distinguish a man from a donkey is that one laughs and the other does not.
- [3] In all societies humor is important not only in individual communication but also as a molding force of social groups, reinforcing their norms and regulating behavior.
- [4] "Each particular time, each era, in fact each moment, has its own condition and themes for laughter... because of the major preoccupations, concerns, interests, activities, relations, and mode prevailing at the time."
- [5] The ultimate goal of anyone who studies another culture, such as ancient Greece, is to understand the people themselves who were more than the sum total of monuments, historical incidents, or social groupings.
- [6] One way to approach this goal directly is to study the culture's humor.
- [7] As Goethe aptly observed: "Men show their characters in nothing more clearly than in what they think laughable."



12번 아이의 행동에 대한 제한



restrictions on a child's behavior

[1] A child whose behavior is out of control improves when clear limits on their behavior are set and enforced.

[2] However, parents must agree on where a limit will be set and how it will be enforced.

[3] The limit and the consequence of breaking the limit must be clearly presented to the child.

[4] Enforcement of the limit should be consistent and firm.

[5] Too many limits are difficult to learn and may spoil the normal development of autonomy.

[6] The limit must be reasonable in terms of the child's age, temperament, and developmental level.

[7] To be effective, both parents (and other adults in the home) must enforce limits.

[8] Otherwise, children may effectively split the parents and seek to test the limits with the more indulgent parent.

[9] In all situations, to be effective, punishment must be brief and linked directly to a behavior.