

# Lifeline



Lifeline 58  
Year 14 - Edition 2



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# PREFACE

Dear reader,

Time flies by quickly, and I present to you the second Lifeline of the academic year. This time with a theme that's a bit cheekier than you're used to: 'Pleasure'. Most of this edition will be related to sex, a topic that nowadays should be normal to talk about, but still remains controversial. Talking about sex is important, and also a lot of fun. There is no need to feel embarrassed or uncomfortable, it's just sex, get over it. In this edition, you can read about orgasms, sex positions, and some other things that are related to pleasure, like addiction and music. Sadly, we no longer have our film review, but we do have something else in store for you: the new "Please, do try this at home" section! Since this Lifeline will probably be out around Valentine's day, you might want to read this page. And since you're busy doing this anyway, you might as well also check our review. Enjoy reading, and have fun!

Hugs and kisses,

*Nadia van Eekelen*

Lifeline editor in chief 2019-2020



Dear reader,

As winter is approaching, the nights become longer, and the days grow colder. You might wear some extra cosy socks or a nice, thick sweater. During these soft winter days we try to stay occupied and find pleasure ourselves. So, we find comfort in the three F's: food, friendship, and feasting. My guilty pleasure is "patat speciaal"; it keeps me warm and happy. Others might find pleasure in other things, such as hanging out with friends and getting drunk. It is important to stay active during your student life and find pleasure after these long-lasting lectures and lab hours. The theme of this Lifeline is 'pleasure', and we as future scientists find pleasure in fun facts like the largest living organism is an aspen grove which has an interconnected root system with a group of genetically identical quaking aspens. Enjoy reading more about pleasure-themed articles in this issue, but perhaps of other content than this fact.

On behalf of the fourteenth board,

*Sami Balahsioui*

Chairman of GLV Idun 2019-2020

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# SCIENTIFIC NEWS

By Lars de Ridder and Nadia van Eekelen

## Music's secrets to make you feel good

When you hear a song for the first time, your brain automatically predicts what sound will come next. This is based on the music you have listened to in the past. Pleasure in music is experienced when your expectations are met, but not if they are met all the time.

On November 7th (2019), a study was published suggesting that uncertainty and surprise in music is what makes it pleasurable. In the experiment, when a participant was sure what was coming next, but the song unexpectedly deviated and surprised them, they perceived this as pleasant. It also worked the other way around: if a participant was not sure what was coming next, but the sound that arrived did not surprise them, this was also pleasant. This is probably because they had guessed the next chord correctly. It is thus an interplay between the anticipation beforehand, and the surprise afterwards. This interaction is reflected in the activity of the amygdala, hippocampus, and auditory cortex. These brain regions are important in processing emotions, learning and memory, and processing sound (respectively).

These findings can be used to produce algorithms that predict if a song will do good and end up in the top charts! Vincent Cheung (lead researcher): "It is fascinating that humans can derive pleasure from a piece of music just by how sounds are ordered over time."



## The truth about the clitoris

For many years, a debate was going on as to whether the clitoris is built just for female sexual pleasure or has a role in reproduction. A review published on the 5th of November (2019) finally answers this question and ends the debate. The clitoris has both pleasure and reproductive functions!

This might not be really surprising, the clitoris is right in the reproductive area anyway, so the fact that it helps out with reproduction seems logical. However, it has long been assumed that the clitoris existed exclusively for pleasure.

The study in Clinical Anatomy shows physiological evidence for a reproductive function. Stimulating the clitoris activates the brain to cause changes in the female reproductive tract. These make the reproductive tract ready to receive and process sperm so that an egg can be fertilized. The changes include enhancement of vaginal blood flow, an increase of vaginal lubrication, oxygen and temperature, and a change in the position of the cervix. The latter change brings the cervix away from the semen pool, giving sperm more time to become mobile and activated to fertilize the egg.

This finding changes a major sexual belief and also has a big effect on clinical researchers. Because the clitoris has always been a mysterious little organ, this study will be a step forward in sexual health research.

## Questions rise about vaping

Vaping has become very popular in the last 5 years. Often it is said to be a healthy alternative to smoking. This is often claimed because in vaping the used compound doesn't burn but is vaporised. In that case toxic compounds created by fire don't emerge, for example benzene, acrolein, polyaromatics and other carcinogens.

With the absence of those toxic compounds, people can still inhale nicotine, without the toxic compounds. The effect of nicotine will be the same and therefore vaping is seen as good alternative to smoking. By that claim the popularity of vaping sky rocked in the last 5 years and the amount of people that change their smoking habit to vaping still increases. Because vaping is relatively new, not much research is done in humans. There are multiple animal studies that have tried to see the long-term effects of vaping, and those found suggestions that vaping could induce different lung diseases and could increase the risk of getting cancer.

### How does vaping work?

A large portion of the vapers work on batteries. With that energy the used compound will be heated and will vaporise. There are many options when it goes about the compound. People can use nicotine, weed, hash or other compounds consisting of synthetic flavours. The heating will create an aerosol, a substance with little drops of liquid in gas formation. When inhaled the used compound will descend into the lungs.

### A good alternative?

There has been an increased amount of reported diseases caused by vaping. In the USA 47 deaths are reported, induced by vaping. Peter Shields, medical oncologist at Ohio State University's Comprehensive Cancer Center in Columbus, reports that "They look unlike anything seen in cigarette smokers". It is suspected that those injuries are linked to vitamin E oils that are added to e-cigarettes containing THC.

### Animal studies

Animal studies are done to examine the long-term effects of vaping. One of those researches was done at Baylor College of Medicine in Houston. They found how immune cells, macrophages in the pulmonary area, were swollen with fat, an abnormality. They tried to find an explanation for this result. It is known that macrophages not only are immunity active, but also recycle the lung surfactant. They came up with the idea that

added solvents in vapers, that are used to dissolve nicotine, will not only dissolve nicotine, but also the lung surfactant which will then be recycled by the macrophages. Whether this was a problem they found out after giving the used rats a flu virus. The ones with the affected macrophages died, suggesting that macrophages in cases of vaping were weakened.

The main reason people stop smoking and start vaping is the decreased risk to getting cancer. It is widely believed that vaping is much less carcinogenic compared to smoking tobacco. However, that doesn't mean its risk-free. A study done at the New York University School of Medicine exposed mice 54 weeks to e-cigarettes. They found that those mice had an increased risk of lung cancer and showed changes in bladder cells that foretell cancer. It is however not clear whether this effect is translatable to humans and for that reason it is crucial to start human studies to see this effect.

### Human studies

Thomas Eissenberg, a psychologist who co-directs the Center for the Study of Tobacco Products at Virginia Commonwealth University in Richmond, is active in the field of human studies. He is particularly concerned about vegetable glycerin and propylene glycol, which can dry up tissues, and they're being inhaled across "membranes that are trying to be kept moist," Eissenberg says. "I wonder what the long-term effects of that aridity are going to be."

A study by Eissenburg in Cancer Prevention Research that compared 15 healthy volunteers who used e-cigarettes without nicotine for 4 weeks with 15 people who never smoked or vaped. Bronchoscopies on the vaping volunteers showed minimal but measurable signs of inflammation in lung tissue and lung fluid.

His team is recruiting new members for a larger study of 440 volunteers, to measure all kinds of variables, e.g. heart rate, blood pressure, artery thickness and stiffness, and aerobic function. With these human studies he hopes to get new insights in vaping and find out in what scale vaping is harmful.



# PLEASURE ISLAND OR THE ISLAND OF DEATH?

By Roos Slijfer

Maybe you have heard about it: the festival of the century would take place on April 30-31 and May 5-7 in 2017. It was going to be amazing! Even influencers on Instagram promoted the event, people like Kendall Jenner, Bella Hadid, Hailey Baldwin and Emily Ratajkowski. Even they were excited to go to this amazing party. The location was epic: it would take place on the Bahamian island of Great Exuma (Norman's Cay), the private island of Pablo Escobar! To attend the festival, you had to pay a lot of money, in the range of thousands of dollars, and you had to be kind of famous, but it would be worth it. The attendees would sleep in luxury villas and eat gourmet meals every evening. It all sounded amazing and very trustworthy because even celebrities and influencers were promoting it. And it was so damn exclusive, so every person who thought to be important wanted to go there. There would even be a real-life treasure hunt, and you could win a piece of land: your own private island! So far, so good, right?

The two co-founders (Billy McFarland and Ja Rule) had their first press-piece at Web Summit, and mentioned their product for the first time: an app where you could book different artists more easily. The two co-founders hired all sorts of teams to promote and design this festival. FuckJerry was hired to do their promotion, for example. When they went to the island to shoot a promotion video, they didn't only bring the camera crew and the co-founders. Ten supermodels were also there, like models that everyone knows (apparently). So when they came home from their weekend in the Bahama's, the girls posted all their pictures and they were told to put #FYREfestival under their pictures. December 12th 2016, the orange tile was posted on Instagram by different celebrities around the world. This tile was known as the 'FYRE tile'. But what the world didn't know, is that all these famous people were paid to post this. Kendall Jenner was paid 250.000 Dollar to do one post about the FYRE festival. But, nevertheless, the #FYREfestival went viral. Everyone got excited about this amazing party that was about to happen and where every famous person was talking about. Even investors that invested in Coachella, were asking how they could put that money in the FYRE festival now. And within 48 hours, they sold 95% of their tickets.

The first weird thing that was happening, is that the festival was asking the people who already bought a ticket for hundreds of thousands of dollars to put money on a wristband. They wanted to make the festival cash-free, but the wireless system was never tested. Nevertheless, most of the attendees did it anyway, because they trusted that this was a legit festival. So the people that already bought a ticket paid, again, hundreds of thousands of dollars. For the people in the organisation, it became clear that

there wasn't enough money. The houses were not getting paid, and there weren't enough tents to house everyone. The people who were excited about the festival couldn't find any new footage of it. Only the footage of that one promo video and the photos of the models were being used. So people were beginning to ask questions about accommodations and flights, but the people from FYRE festival weren't responding.

So then it was the day of the festival... The campsite wasn't near finished, so the guests were brought to a bar on the beach. This seemed for the guests like an exclusive amazing experience. That was until they were stuck in this bar on this beautiful beach, for six hours... With no luggage. Eventually, busses took the attendees to the festival site. The bus driver even said to the guests: "They only started setting up a couple of weeks ago". After that the people stood waiting, for what they thought to be the ticket line, but after a while, everyone just went free for all to grab one of the tiny tents that were set up. They were all panicking because they were stuck on this remote island, without food or water. People were even starting to fight over supplies. Social media users called it a 'lord of the flies situation', but with celebrities and influencers. The guests tried to go back to Miami, but there were no airplanes. So they had to stay overnight, again, with no food or water. The FYRE festival was a disaster, and the founders have a ton of lawsuits against them, but luckily, no one died.



# FLAMING DORITOS AND BDSM

## GAINING PLEASURE OUT OF PAIN

By Marit Bonne

One of the moments I remember in almost full detail must have been the moment I jumped out of a plane. I was such in a euphoric state for the rest of the week actually. When I told people about my experience, they either reacted shocked or very interested (except for my co-worker who didn't think it was THAT cool). The shocked reactions got me thinking: why on earth would someone jump out of a plane and experience almost nothing but pleasure?

It is dangerous, you might die or get hurt and that is not really a thing we as humans are going for. Like parachuting, other experiences might seem weird pleasure sources at first, but when explained, they really aren't.

Let's start with the phenomenon called "runner's high". Those of you who ever got out for a run might know what I am talking about. The feeling of pushing your boundaries and just going over the edge is one that gives such a rush of pleasure that it is probably the reason why many runners enjoy running at all.

At the start of a run, runners often experience burning legs, which are caused by the lactic acid produced due to a lack of oxygen. This often causes the runner to stop, but when he continues, the hippocampus reacts by ordering endorphins who prevent the release of chemicals that are involved in pain transmission. The "runner's high" they then experience is caused by a spike in anandamide (a natural painkiller), a spike of adrenalin (which excites even further) and the endorphins, that also stimulate brain areas involved in pleasure. All these stimulations are very similar to marijuana use and a heroin shot.

I can't think of a stronger connection between pain and pleasure than BDSM. While the common sense of most people can't imagine pain being perceived as something sexual or even pleasurable, research shows a link between the two. Researches used a fMRI to see which brain areas were stimulated while woman had an orgasm. In total, 30 areas were stimulated, including the areas that are involved in pain. In addition to that, some cancer survivors who got their spinal cords cut to relieve pain, also lost the ability to have orgasms. But when the pain returned, the orgasms also did. A theory that people get turned on by pain is the benign masochism theory. This theory states that people dig for pain while being aware that it won't cause any serious injury or damage. Humans are the only organisms known that are capable of this.



Ever tried the Doritos roulette? The chilli pepper that is usually in spicy food triggers sensors that would also be triggered if your tongue was actually on fire. A study found out that when kids are exposed to chilli at a young age, they first dislike the taste. But as they get older and eat more spicy food, they will actually enjoy the taste of the peppers. They did the same study with rats, but failed. The rats showed no enjoyment and not even a milder disgust towards the peppers when they got older, no matter how small the manipulated amount of chilli in their diet was.

We already knew that humans are strange creatures and yes, human pleasure is a mystery. Things that common sense tells us to give us pain or feel agony, can actually be turned into very pleasurable things by the brain. Even though it might not feel like you get pleasure out of the Doritos challenge, remember that you do. Both emotionally and physically.

# PECULIAR PLEASURES

Dana Frank and Meiske Pieters

## Ducks

The animals we feed bread when we're young actually have very complicated genitals. Both the males (drakes) and females (ducks) developed genitals that resemble corkscrews thanks to an arms race. Since ducks form bonds for a whole mating season, rival males often violently attack female ducks. One in three duck mating events are actually rapes. The drakes pull out their 20-centimeter corkscrew-shaped penis (yes, for real) and push it in the female reproductive tract. Because of the ridges and backward pointing spines, the huge phallus can eject sperm further in a female. However, the females also developed a rather extreme reproductive system. With a vagina that is long and twisted, with dead-ends and spirals they can have a say in who fertilizes them. The females also conveniently developed thicker vaginal walls so they can withstand the penises without rupturing.



## Giraffe

This long-necked animal is an animal with a lot of peculiar facts surrounding their reproduction. Firstly, monogamy is a foreign concept to them and even sleeping with the same giraffe twice is uncommon. The second thing you need to know about giraffes and the way they get it on is about their preferences. You see, male giraffes only really have sex with female giraffes when they have to. Unless there is a chance of procreating, when it comes to getting off, their tastes are mostly for other males. About 90 per cent of all sexual encounters male giraffes have is with other male giraffes. So in other words, they are almost always bisexual with a masculine preference. The reason behind this is beyond most scientists but you really don't have to think about it for too long to come up with an idea.



The thing is that heterosexual intercourse for giraffes is a fairly unappealing ordeal. It usually starts with a male essentially shoving his face onto the female's genitalia to try smell if she's ovulating or not. If she's into it (brace yourself) the male gets a faceful of urine and intentionally tastes that too, for whatever reason... Eventually, the 'act' itself happens as you might imagine it, with the male behind the female and lasts about 3 seconds in total. The male goes away and the female has to endure a 400-day pregnancy (!) while her baby daddy is likely getting it on with other men.



## Brown antechinus

The *Antechinus stuartii*, is a marsupial found in Australia. They are on this page because of their dramatic life ending. The first 10 months of their life is rather normal, but then mating season begins. In mating session of 5 to 14 hours they try to mate as many females as possible. However, why would the females do this? Because it makes for the best offspring. Only the males with the best genetic quality, and better performing sperm, will fertilize the females. The sperm of all males will fight an internal battle, after the female mated with lots of males. Back to the dramatic end for the male antechinus. Eventually, after two weeks of hard work, stress hormones make the immune system collapse with internal bleeding and infections as a result and an inevitable death.



## Sigurður Hjartarson

Okay, so this is not an animal with a weird reproductive system, or extreme mating ritual, but an Icelandic man. A man who founded the Icelandic phallogical museum, with a collection of 280 penises. We could say it is a peculiar pleasure, since this is an obsession after all. So, if you ever want to see 55 whale penises, go to Reykjavík.

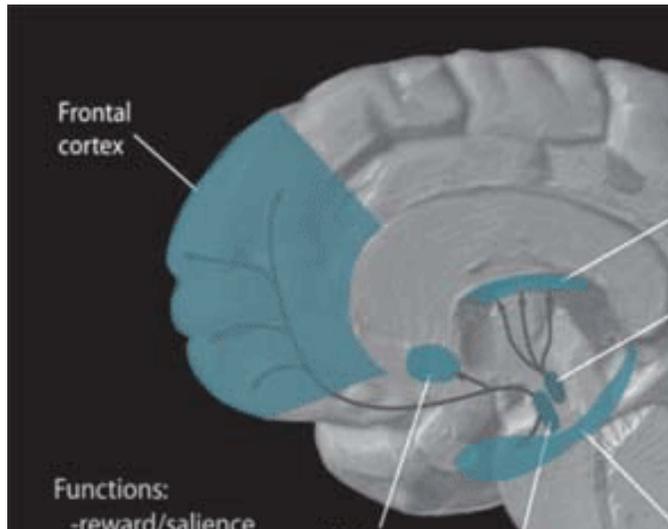
# THE CRAVING BRAIN

By Diana Nacy

Cravings! What are cravings? Powerful, uncontrollable desires for something. The list of possible cravings ranges from tangible things, like food or cigarettes, to intangible things like intimate connections. For the longest time we thought that we crave the things that we miss in our life. So if you crave a huge steak then it's because your diet lacks iron. While this theory might be right, we also crave things that aren't necessarily needed, like drugs and cigarettes. So why do we crave after all?

Pleasure, my dear, pleasure. We're hard-wired to pursue the things that switch on the reward systems in our brain because that gives us a better feeling. Evolutionarily speaking, feeling good is associated with food and reproduction which boosts our survival as a species.

Researchers at the University of Yale of Medicine found that regions in the brain associated with regulating emotions, like the prefrontal cortex, show increased activity when decisions about cravings were made. They've also found that a decrease in the activity of the ventral striatum is correlated with decreases in cravings. This region is associated with reward-seeking behaviour and drug craving.



Pleasure is still poorly understood, however we do know that it involves surges of chemical signalling compounds that include our bodies natural opioids (endorphins) and other neurotransmitters in regions of the basal ganglia (the brain's reward circuitry)

Drugs and other addictive substances use the same mechanism that is used to activate those reward systems. The only difference is the surges of neurotransmitters are now much greater than the smaller bursts produced naturally.

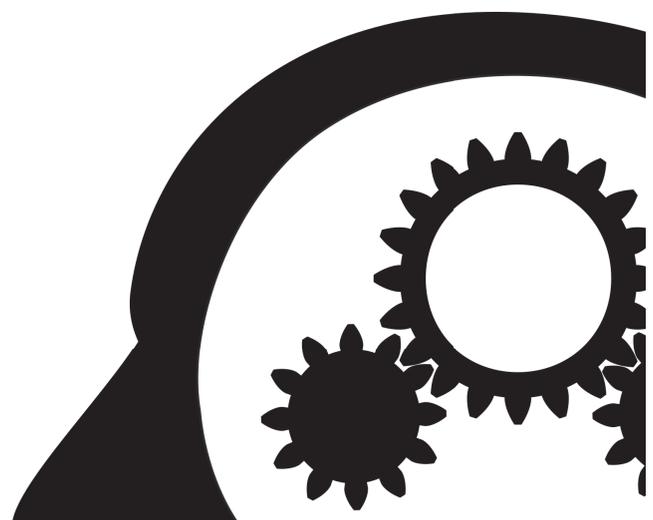
Because pleasure is good for our survival, or so do our brains think, we're wired to increase the odds of us experiencing the same pleasurable activity. That's when our dear old friend, do-

pamine, kicks in; dopamine normally causes changes in neural connectivity so that we remember the pleasurable experience which leads us to repeat it. And just like drugs produce intense euphoria, they produce huge surges of dopamine which 'teach' our brain to seek drugs for pleasure. That's how we crave drugs.

Food cravings work in the same way as drugs. We crave fatty and high-calorie food, because it increases our odds of surviving periods of food scarcity. That's why we crave fast food, but celery cravings? No thanks! With food cravings, different neurotransmitters and hormones play a key role, but again, dopamine plays a huge role in getting you hooked up on those eating habits and cravings.

What else do we crave? Sex and intimacy. When it comes to our sexual behaviour, our mind is controlling and suppressing it about 23 hours a day. In the 24th hour you're free to do and think what you want. Of course this estimation is not 100% accurate because our sexual behaviour depends on other factors, like gender (men tend to think more often about sex than woman), environment, stress, etc. Don't worry, craving intimate connection is totally normal. Though when you become obsessed with sex, and I really mean obsessed, that you're incapable of doing anything else because you're thinking about sex and craving it, then you might have a mental disorder. Sexual obsession is actually very common in people with OCD. Sexual dysfunction and hypersexuality might occur to anyone and the causes are various; brain tumors or damage in specific brain regions are common.

Cravings come in different shapes and forms. While some cravings can have an evolutionary function, others are the result of mental disorders or brain injury. One thing for sure: different brain regions and neurotransmitters play a huge role in this process.



# AN ODE TO MISSIONARY POSITION

## TRY THIS IF YOU WANT TO FEEL SPECIAL

By Juultje Eenink

“Missionary position jokes” is the first thing suggested when you type in the name of this well-known sex position. Well-known, but not necessarily very appealing to the masses, as the first suggestion once again confirms. So, why is this particular position by many considered to be vanilla, dull and just in general not that special?

Maybe it is because of the rise and expansion of porn caused by the internet, showing people all that is possible and, according to some, all that should be tried in the bedroom. Maybe it is because of other social media arising together with the internet, that allowed people to share their opinions and reinforce them to others. An example of this is the second highest voted description of the missionary position on Urban Dictionary: “Probably one of the most overused and boring positions ever. The chick lays on her back, and the guy gets on top. Nothing special.” This seems a legitimate explanation, because after hearing this, who’s going to brag about loving this notorious position? However, most people, when asked, claim they don’t like it because they don’t feel as much, or just feel more in other positions.

But do you really feel more? On a physical level, maybe, yes. This differs for everyone, but the actual highest voted description on Urban Dictionary might confirm the lack of physical stress put on the body in this position: “Missionary, the best sex position for them first timers. ‘cause, ladies, it hurts!” On the other hand, missionary position should actually make you feel the most, because on an emotional level it is unique!



*Missionary position*

In the animal kingdom most animals do not have sex face-to-face or, as scientist call it, perform ventro-ventral copulation. Some insects do, some octopuses do, but in vertebrae like us, it’s quite unique. A few vertebrae that are known to mate human-style are primates, beavers and, believe it or not, hamsters, but the ability to perform this sex position hasn’t evolved in most.

There are multiple explanations as to why ventro-ventral copulation might have evolved in primates. It might be because the primates showing this style have a greater cerebral development and intelligence and thus did not have to rely on the stereotypical dorso-ventral copulation position, but were able to experiment and try something else than this back-to-front style. Another explanation is that the posture of these primates with a flat chest and flexible shoulder joints has facilitated not only the missionary position to evolve, but also the female superior position, where the female is quite literally on top.



Last but not least, missionary might have evolved because it allows for the two primates involved to maintain eye-contact. Maintaining eye-contact means maintaining a form of communication during sex, which is from an evolutionary point of view very useful. From a modern human being point of view though, it’s just really hot. This position can make you feel connected to the person you are having sex with on a different level and make you feel things you cannot get from physical stimulation. No, it doesn’t have to be love you are feeling, you don’t have to stare into each other’s eyes like two teenagers in love. You can also give them your cheekiest glance before doing something they don’t expect or just watch them react to what you are doing to them.

Still doubting whether the missionary position can give you everything you want? Don’t worry. Because if you ignore the suggestion of missionary jokes and just google “missionary position”, a whole lot of sites pop up providing you with guides and the promise of amazing missionary sex. So, just give it a go and remind yourself of what a special little primate you are.

# MUSIC SECTION

By Devi Seijkens

Born and raised in Bridgeport, Connecticut on October 16th, 1977, this wonderful musician attended Berklee College of music in Boston with Belief of becoming the greatest guitar player to have ever lived. However, in 1997 he dropped out and moved to Atlanta to further pursue a career in music. Why Georgia? I hear you ask, but I don't really know either. After spending time playing several bars in the area, he got signed to a record deal and found success with both his first and second studio album. During this time he already became one of the biggest celebrities on the planet and started dating other very big stars. This soon turned into Heartbreak Warfare as the media found both he and his former love interests wrote songs about each other, which made it look like they were fighting through their records. He wrote Love Songs For No One and has been on record to say he's simply Dreaming With A Broken Heart.

too. His sixth studio album got even more into the folk genre, further elaborating on his diversity. Although true fans would've recognized this earlier, as he's played and even recorded covers of songs by other artists throughout his career. He's even done some Heavier Things lately as he's the guitarist for the Grateful Dead's new group: Dead and Company.

More recently, it's been easier for him to present himself in a New Light. He's very active on social media, specifically Instagram, where he was one of the first to host his own show for Instagram TV. He's also given back to the guitar playing community by working with brands like Fender, PRS and Martin Guitars to develop instruments and amps. These are of course designed to be used by him, but also by anyone who'd like to purchase such equipment themselves. Most notably his newest endeavor with



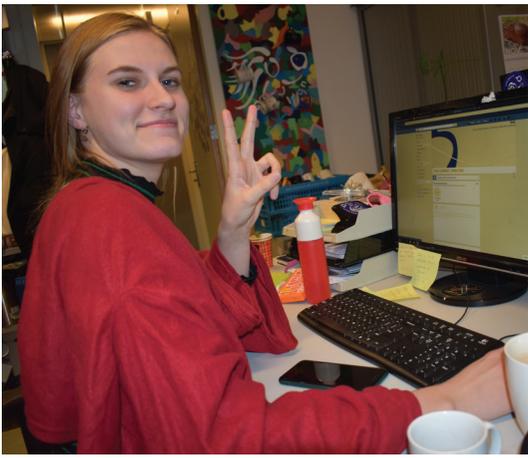
His biggest success didn't come until his fourth live and third studio album were released. It was also during this time that his ego started getting the best of him. After many negative affairs with the Vultures of modern media and one more studio album in the books he decided to leave the Neon lights behind, after Free Fallin' for some time, and move to Montana to be Perfectly Lonely and focus on his mental health. That didn't mean he was Moving On And Getting Over music. During his time in Montana, he let the region influence him in his music, with this album stepping a bit further away from his pop/blues records before and getting heavy folk and country influences. Through this, he was able to show the world just how talented he truly is, as this album was also received very well. But Who Says? he'd stop there? Well, his own body almost did. As during the recording of this album he started having vocal cord problems and required several surgeries and treatments to help him back to health. During this time, he hardly performed but did some shows with Frank Ocean and even played guitar for the Rolling Stones. Luckily, there was No Such Thing as the end of his career yet, and after being In Repair he was able to recover and continue playing his own music and singing

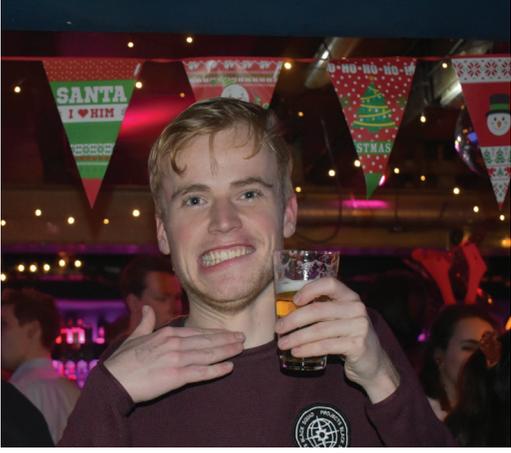
PRS, the Silver Sky guitar, which got some bad rep during the announcement for being PRS' copy of a Fender Stratocaster, but it has actually become well-received since then.

This edition's musician has been Slow Dancing In A Burning Room, but Gravity was able to help him get back on his feet and keep the Shadow Days behind him. He's got Half Of My Heart, musically speaking and I'm sure if you would listen to more of his work, he could show you The Heart of Life too. Anyway, that's enough of My Stupid Mouth, I'm giving the ball Back To You. Now go get inspired, it's In The Blood of all of us.

**XO,  
Devi**

***P.S. When you're done with The Search For Everything, and you've figured out who this article is about: Send your answer to [redactie@idun.nl](mailto:redactie@idun.nl), and you'll be eligible to win one of ten amazing prizes!***





# WHY ORGASMS HAPPEN

By Dana Frank

Heart rate quickens, breathing becomes deeper and faster, thigh and buttock muscles tense, blood pressure ascends to new heights. *Sound familiar?* The previously swollen and blood-engorged genitals being at the peak of their sensitivity, respond to continuous, rhythmic stimulation. And then, as the accumulated sexual excitement overflows, the autonomic nervous system performs perhaps its greatest act and unleashes a series of muscular contractions throughout the pelvic floor. Those pulsing sensations of neuromuscular euphoria, dear reader, are collectively and affectionately called orgasm. You can recall the feeling for yourself.

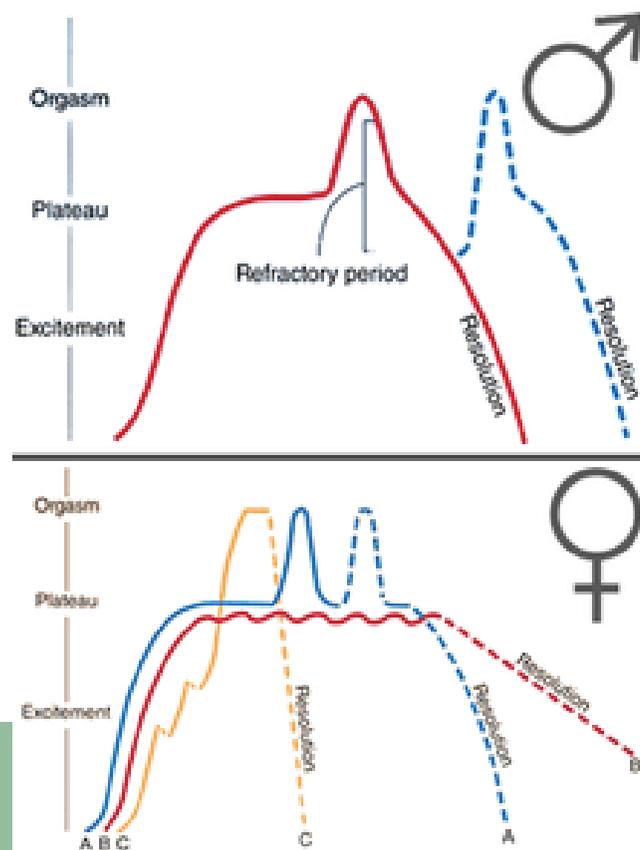
It's no surprise to the well-versed individual that orgasms feel pleasant. When the brain gets flooded with prolactin, oxytocin, and endorphins, the causal behavior generally gets reinforced. Of course, the direct effect of muscle contractions in male genitalia cannot be overlooked. Those beloved autonomic pulses travel through the holy trio of sexual glands: Cowper's, seminal vesicles, and prostate, forcing the expulsion of an infamous, milky-white fluid from the urethral opening of the penis. In the event of a male-female interaction, this fluid has the potential to perform its actual task: the inhabitants of the seminal fluid make their way to reproductive bliss, securing the existence of our species. That's the main reason why they're important.

But when Masters and Johnson set out to map the sexual response cycle, describing the stages of arousal, plateau, climax, and resolution, very little was known about the properties of the experience itself. Still today, the function and value of the female orgasm, in particular, is being speculated. Ideas vary from promoting pair-bonding between partners to boosting the chance of conception. It may be the case that vaginal contractions move the cervix in such a way that it literally pulls sperm through the os (cervical opening), helping it get closer to the crucial position. Evolutionary physiologists have also hypothesized that those males who are especially considerate in the bedroom are likely to yield further advantages and that the female orgasm adds an additional layer of selectivity. This idea gains my personal merit.

Unfortunately, the ability and likelihood of a woman reaching climax during sex seems to be innately predetermined for the most part. Researchers estimate between 30-60% is genetically fated! Orgasms are gifted to some and withheld from others.

So how do we describe an orgasm to someone who has never experienced one? Is it possible to elucidate what an orgasm feels like? A study from the 70s collected subjective descriptions of orgasm from men and women, and later removed words associated with genitalia. The result, in verbal accounts, was almost indistinguishable between the sexes and typically included the phrases 'euphoric', 'throbbing' and 'explosive.' This makes a lot of biological sense. Even though neurological patterns differ between sexes for the other stages of sexual response, in the orgasmic state, activated brain regions are identical. Quite a unifying thought. The lateral orbitofrontal cortex, for example, which is responsible for judgment, reason, and control is effectively disabled during orgasm, which might explain one or two things to the sweet reader, about his/her own coital habits.

Besides the process by which fertilization occurs, orgasms seem to have a lot to offer. Mate choice, conception aid, and bonding are among the most impactful. But to end an article about orgasm in this way would be dishonest for me. Because while the science is undoubtedly exciting, the most phenomenal aspect of sexual pleasure has nothing to do with it. It's somewhat humbling to admit when science can no longer do its job, and art must take over and do the explaining.



# PLEASURE IN A LIQUOR BOTTLE

By Devi Seijkens

After a long day of studying (or working nowadays), I sometimes desperately need to unwind. Although I don't do it often, one of the most effective ways for me to do so is as follows: I connect my phone to a Bluetooth speaker, start playing some Frank Sinatra and grab me a nice lowball glass. I then grab my bottle of choice (I generally have 5 different ones in stock at home) and pour myself a nice glass. My favorite is a Bushmills Irish Single Malt, 10 years old. But what do all these things mean?

*Yes, ladies and gents, this article will be all about whiskey.*

The life-water is generally made by malting barley. After the barley has germinated, it is dried above an open flame. This process has an enormous influence on the flavor of the whiskey. Sometimes the fire source contains peat, sometimes it doesn't, but it will almost always be key in giving a whiskey a smoky flavor. The dried barley malt is then shredded, and water is added, creating a starchy dough-like substance. After some time, these starches are converted to sugars. These sugars are then converted to alcohol by yeasting, and the product, called wash, contains only approximately 7-8% alcohol. The wash is then distilled in copper stills, where it will be concentrated and can be put in casks, where it can begin aging. Other than many other alcoholic beverages, whiskeys only mature in the casks, and the process is not continued in the bottle. Aging casks are generally made of different types of oak wood, and can sometimes be reused from other spirits to imbue some of their flavors.

There is an extremely wide variety of whiskeys. Most commonly and classically, we have Irish and Scotch whiskey made in Ireland and Scotland, respectively. While Irish whiskeys generally simply stick by their country of origin and their name, Scotches commonly also refer to the area where they were produced.



They distinguish between Highland, Lowland, Islay, Speyside, and Campbeltown. For the geography lovers among us, Islay is the only Scottish island that has their own distinction, whiskey from Arran, Jura, Mull, Orkney, and Skye are considered to be Highland whiskeys. A big difference between Irish and Scotch whiskey is the amount of distilling they do. While Scotches are usually distilled twice, Irish whiskey is commonly distilled thrice.

However, many other countries have started making whiskeys and quite successfully so. Japanese whiskeys like Nikka (recommended by the author) and Suntory have won several awards for excellent quality, and Japanese whiskeys have a reputation for high quality. But you can add America (Jack Daniels), Australia, Canada, Denmark, Finland, Georgia, Germany, India, Sweden, Taiwan, and even Fryslân to the countries that distill their own whiskeys.

So, what if all of this is new for you? Maybe you've tried whiskey once and didn't like it, but you really want to like it. I'll let you in on a little secret: I hated my first glass of whiskey when I was 16. But since then, I've tried many different ones and really come to like the different flavors and tastes it has to offer. So try them out, maybe you'll find one that you like. And if you need a recommendation, you can always come ask me.

Oh, and don't forget to put on some Frank Sinatra.



# THE MYSTERY OF HUMAN PLEASURES

By Nadia van Eekelen

The meaning of pleasure seems obvious. You know what gives you pleasure. But now ask your neighbour what gives him pleasure. The answer might be completely different. Pleasure in humans is something that is not well understood. When you think of pleasure, you can think of basic things: eating, drinking, having sex, laughing, etc. These are things that make a lot of sense; it's natural selection. We need food and water to survive, we need to have sex to reproduce, and we need to take care of our children to pass on our genes. But we find pleasure in many more things, probably things that are unique for humans.

We get excited when we pet a dog. We go to movies that make us cry or that make us scared. We eat chili peppers that are too spicy. We pay hundreds of euros for art, clothes or any other object that we really want to have. We listen to songs that we love and repeat it until we get sick of it. We slow our cars or bicycles to look at brutal accidents. We drink coffee every morning, even though it's incredibly bitter. Why?



These pleasures are probably not biological adaptations, like eating, drinking, and sex. According to Paul Bloom, a professor of psychology and cognitive science at Yale University, they are best understood as accidental by-products of the way we make sense of the world around us.



The pleasure we get from something is influenced by what we think that thing really is. An example of this I loved the most is an experiment with wine. They got people to lie in an fMRI scanner, and while they were lying there, they got to sip wine via a tube. At the same time, they got information about the wine. The wine was poured from different bottles, but all people, of course, tasted the same wine. The result? The wine poured from the fanciest bottle with the highest price tastes the best. When drinking the expensive wine, parts of the brain associated with pleasure, like the nucleus accumbens, were far more active. So it's not just that you say you like the expensive wine more, you really experience it in a different way.

There are many more examples of how pleasure is influenced by our beliefs. It matters to us what brand our shoes are. Walking around in Crocs is far less pleasurable than walking around in Nikes. It matters whether or not you know what you're eating. You can think the Dutch "frikandel" is delicious until someone tells you what it's made of. It matters whether a story is truth or fiction. If "The Hunger Games" or "You" were based on a true story, it wouldn't be as entertaining to watch as we think it is now.



Me finishing season 2 of #YOUNetlix



Because everybody sees and experiences the world around us differently, the things we find satisfaction in are different too. Maybe you find pleasure in getting up early in the morning, whereas I find pleasure in sleeping in. This does not mean that one of us is wrong but makes it hard to understand what pleasure is for individuals. Try to answer the question: 'Why do you like what you like?'

# PLEASE, DO TRY THIS AT HOME



By prof. MD

## *the list of numbers*

Experiments to try at home!  
Better safe than sorry, wear protective gear!

Dear Idunaren, welcome to a new section! This is my first section with the Lifeline and also my very first time to write about experiments. This issue's theme is pleasure and what would be better to try at home than test some numbers. So I had a special one in mind; **numeric sex positions**. There are some famous ones you have probably tried before of course, but you can always add something to the list!

(No the lifeline is not dirty they already made sex manuals in the first century.)

In this article the one with the sausage is called a sir and the one with a donut like hole a damsel. So the terms damsel and sir are unisex



### **No.1 – single**

Of course this will be you and your hand/foot. Other hands or feet are excluded.

### **No.4 – rodeo**

You need a strong sir who can make a bridge. This way you get a flagpole on top of the bridge. Where a delightful damsel can sit on.

### **No.5 – V**

A table or high chair is needed. The variable hereby is the length of the sir's legs. Now as damsel you are going to sit on the table. By putting up your legs as high as the sir's shoulders, you can form a V.

Recommendation: as sir you obviously wrap your arms around your damsel so she can stay in shape.

### **No.8 – the octopus**

Hereby the point of the deed is the head of the octopus. The arms and legs are the tentacles. As damsel you put your legs on the sir's shoulders and lay back with your arms. As sir you are the bottom so you can freely stretch your legs and lay back with your arms. Now you can check if you did it right:

1. In the middle you have your 'head'
2. On one side you have the arms of the sir and the legs of the damsel
3. On the other side you have the legs of the sir and the arms of the damsel

### **No.27 – tango**

As damsel you need to make a split. So one foot on the ground and the other in the neck of the sir.

### **No.30 – the loving heart**

Take a scissoring position and give each other a kiss.

### **No.33 – Yin-yang (opposite of 69)**

So now the sir is on top instead of the damsel.

Warning: as sir do not lay down but stay on your knees, give the damsel some space.

### **No.41 – the hand of the other person**

FINALLY I'M NOT ALONE ANYMORE

### **No.42 – fellatio, blow it!**

The step up from 41 to 42.

Warning: only for damsels!

### **No.57 – missionary**

Sir-on-top with each other's face close to each other

Tip: damsel it's your time to sea-star!

### **No.60 – cunnilingus**

Sir, it's your turn to blow.

### **No.68 – 68**

It works the same way as 69 but now only 1 person enjoys. If you're the on top and you are not feeling it. Then switch from your belly to your back. Now you have a mattress and a way to have pleasure and relax at the same time!

### **No.69 – 69**

Yeah, the one coming to your mind right now. Hahaha coming...

### **No.71 – doggy over a table**

The 7 is the damsel who will lay with her belly on the table. Now the 1 or the sir can join in at the back of the 7 or damsel.

### **No.99 – spooning**

Did you worked your way up and you started from the bottom and now you're here! It's time to relax together! Great job guys!

# A CHAT WITH...

## Dr. Danny Incarnato

By Dana Frank

*On the 5th of December, one of the university's most recent admissions, Danny Incarnato, invited me into his office for a conversation. He had agreed to talk to me a week prior and proceeded to shares his experience with academia and life accompanying it. This is what he had to say:*

### When were you born? Where?

I was born on 16 August 1987 in Sienna Italy. I liked growing up there, but I didn't feel like I really belonged. My parents are not from Sienna, and it's a pretty closed community with strong traditions that I wasn't really a part of.

### Where did you do your undergrad study? How was it?

I also did it in Sienna. The professors were quite good and I really liked it. I did both my bachelor's and master's there.

### Did you do any other activities during your studies?

I always liked doing sports and went to the gym a lot. I actually wanted to get a license to become a professional self-defense teacher. But in the end, I didn't really see the purpose of doing it as I was too overloaded with my Ph.D.

### What about your PhD research?

I did it Turin, so I moved to the north. The research institute is called the Italian Institute for Genomic Medicine. We had a lot of funding so we got to buy an Illumina sequencer, which few labs had in Italy at the time.

### About what was your research?

In the beginning, it was about epigenetics, stem cells, DNA methylation, and differentiation, that kind of stuff. But after a while, I realized that I was more interested in RNA, so I began to work with microRNAs instead. After publishing my first work on this topic, I started looking into RNA structures using the sequencer that we had, and I developed a method for mapping the structures in vivo. I'm still doing that kind of stuff.

### How long have you been working for this university?

I actually started on February 1st of this year, so I'm a freshman.

### What was your inspiration for becoming an academic?

Working in industry has its benefits, vacations, defined working hours, and as an academic you are essentially always working, but I still value the freedom more. It, of course, comes with a price because people depend on you. I found though that

this is the only real thing I'm good at. I always think that if research is the first and last thing you think about in the day, this is the right place for you.

### Your lab name is inspired? What is the story behind it? (IncaRNAtO)

My surname in Italian has a religious meaning, which is basically becoming flesh, referring to the birth of Christ. A lot of kids made fun of me in elementary school for it. But now it has a good use, and people find it funny.

### Do you have a wife/partner?

Yes, I have a partner; we met here in Groningen. Before coming here I was really focussed on my Ph.D. and postdoc. Now I'm 32, and I felt I was ready for a deeper commitment.

### What about your other hobbies?

As a teenager I really liked computer hacking-related things. It's really handy now, because a lot of my work relies on bioinformatics.

### How do you find the Netherlands and Dutch culture?

I really like the directness of the Dutch people. I'm a brutally honest person, and I don't like it when people aren't straightforward. I've found that I can be too direct even for some Dutch people!

### What is your favorite Dutch food?

That's hard because I'm Italian, but it's probably stamppot. What would you take to an uninhabited island? My partner.

### Do you prefer fusilli or penne?

Penne, because they can hold the sauce better.

### If you were a superhero, what would be your strength?

As a kid, I always wanted to fly. But now I would say mindreading because it would be useful.

### I found a picture of you wearing a red, plaid shirt. Are you inspired by lumberjack culture?

That's actually just by chance. I like my beard, and the shirt was a present from a friend who went to the US. I always had trouble finding shirts that fit me in Italy, so when he was there, he told me about the big sizes they have, and I told him to just pick one. But people have asked before.

### Coffee or tea?

Coffee.

### Beer or wine?

Beer. It's weird not just because I'm Italian but also because my dad was a very famous wine bar owner. But I just prefer beer.



# PROUD TO BE FOUT

By Marit Bonne

Raise your hand if you checked your Spotify wrapped in December. I am certainly guilty of that. Normally I listen to 'alternative' bands as my dad likes to call them, mixed with rock, house and some rap. But this year in my top three of favourite artist AND in my top 10 most listened songs, the Dutch artist Bizzey popped up. And to be honest I was kind of ashamed of that.

My brother has Suzan & Freek in his most listened list and a friend of mine loves rock but is embarrassed that she genuinely enjoys One Direction. My boyfriend is the typical house-lover but Taylor Swift also sparks his eyes. Guilty pleasure is the basis of an entire festival, an hour on the radio ('foute uur' on Q-music) and you can't do a good karaoke without them. The motto 'Proud to be fout' (when you dress 'fout', think white leggings, mismatching colours and over the top prints) is one that I praise very much.

This is an ode to guilty pleasures. I won't have a good time going out if all I heard was music with only a bass. No you create a fun and amazing atmosphere when Venga Boys or 2Unlimited comes on. It's almost addictive.

Next time when I check my Spotify Wrapped I will not be the slightest embarrassed if Bizzey is among my favourites (idunno I have sort of a weakness for Bizzey's music). Embrace your pleasures and especially your guilty ones. Because one thing I know for sure: when it comes to guilty pleasures, there is nothing to be guilty about.

#### TOPARTIESTEN

Cage The Elephant  
Twenty One Pilots  
Bizzey  
Bakermat  
Milky Chance

#### TOPNUMMERS

DRUP  
Karma Police  
Truth Hurts  
Come As You Are  
Drama

#### MINUTEN GELUISTERD

24.922

#### TOPGENRE

Modern rock



## INTRODUCING...

A NEW MEMBER OF THE LIFELINE!

Koen Freerks



Hey dear readers! My name is Koen Freerks and I'm 23 years old. Originally, I'm from Veendam, which is a small town very close to the city of Groningen. I study Biology and I'm in my third year. I've been living in Groningen for more than 3 years now. I met someone from the Lifeline while writing for a group assignment the other day. She said the Lifeline could be something for me, since I love writing about science a lot! After doing some reading, I really liked the magazine. So, I contacted the Lifeline quickly to see if I could join! Aside from writing, I also love to scuba dive and travel. Every year I go to Zeeland to dive with other students. Did I already tell you I have a kitten called Koda? Now that I've joined the Lifeline it's time to get creative! I hope you will enjoy what I have to offer!

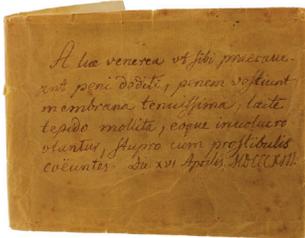
My best,  
Koen

(Pronunciation of Koen: /kɔn/ or K as in "king" OE as the double o in "look", but a shorter N as in "new")

# LIFELINE REVIEWS:

By Lars de Ridder

Condoms were designed to prevent the population from getting STDs. Their existence traces back to 15th century Asia, in which 'condoms' were created from paper or lamb intestines to cover the head of the penis. When more research was done on STDs, for example syphilis, the urge for prevention grew. Gabriele Falloppio, an Italian physician, performed a research in which he found out how linen sheaths soaked in a chemical solution that would fit over the head of the penis would prevent the person from getting infected with syphilis.



The condom made out of animal intestines became more popular at the end of the 18th century, and despite of opposition of religious groups and critics of using them, they still were being sold.

In the early 19th century there was still commotion on the condoms. Many people and feminists claimed it didn't prevent from STDs at all and were of opinion men controlled sexual activity in that way. In some armies condoms were distributed to the soldiers, for example the German army. A famous opposer of condoms was Sigmund Freud. He claimed that the failure rate of all male-controlled contraceptives was too high. Also, he thought that usage of condoms would reduce pleasure of sex. Many churches, for example the Federal Council of Churches and The Roman Catholic Church, forbid use of contraceptives completely.

## Rubber

The first-generation condoms became obsolete when techniques were found to make rubber soft and stretchy. This was firstly done by Charles Goodyear and therefore the opportunity was created to produce latex condoms. These latex condoms were invented in 1920. They were stronger and thinner than regular rubber condoms and had an extended expiration date.

## Modern times

When more research was done on STDs and people found out that HIV could be transmitted sexually, condom promotion was sky rocking. Globally 18,6 billion condoms were used in 2015. Currently the use of condom has staggered, which is called condom fatigue. This is a process of a result of better sex education and knowledge about STDs.

It is also claimed that condom fatigue has to do with the pleasure stiling effect of condoms. Condom manufacturers have for that reason tried to increase the pleasure of condoms and therefore to stimulate the use of them. One way of increasing the pleasure of condoms is to add taste and scent to it. We have tried a couple of those condoms to find out whether they do increase pleasure.



# FLAVOURED CONDOMS

## Test results

	Banana	Strawberry	Apple	Orange	Passion fruit lube
Meiske	6,9	7,4	8,2	6,0	7
Marit	5,0	6,0	3,2	6,3	8,1
Jasper	6	6	5	6	7
Lars	7	8	10	4	9
Devi	4,5	7	3	5,5	8
Nadia	6	7,8	6,5	6,6	8,2
Dana	6	8	6,5	6,5	9
<b>Mean</b>	<b>5,9</b>	<b>7,2</b>	<b>6,1</b>	<b>5,8</b>	<b>8</b>

### Review

We reviewed the smell and taste of the condoms with the use of a banana, as shown in the picture.

### Results

The winner of the review is the passion fruit lube! With an average of 8 this product scored the highest. Especially the taste of this passion fruit lube was broadly loved among the persons testing it.

In the case of taking only the condoms in regard, the strawberry condom won. Its taste and smell was liked the most of the other flavours, which all ended up a whole point lower than the strawberry one

### Quotes

Banana: "Scent is strong, but it's not overwhelming. Flavour is not really present, which is dissapointing."

Apple: "Tastes artificial", "Smells like highlighter markers", "Good smell"

Strawberry: "Smells nice and tastes very sweet", "pleasant smell"

Orange: "Average. Does taste like orange, but smells a bit like soap"

Passion fruit lube: "It actually tastes like passion fruit", "I love it!"



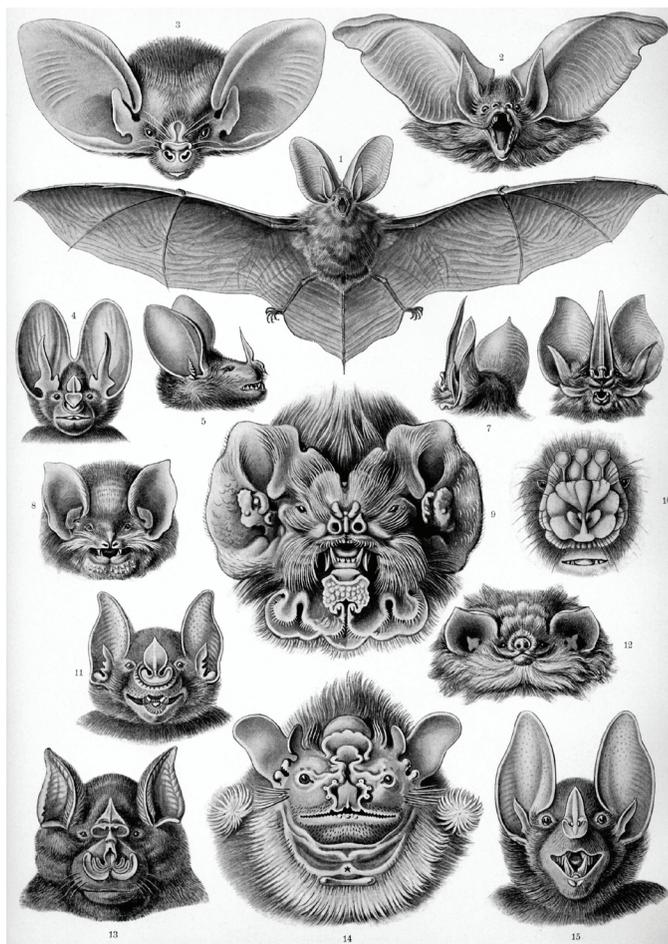
# BAS EN Z'N BEESTJES



*Beasts by Bas*

*By Bas van Boekholt*

Mammals exist in all sorts and classes. There are small mammals living in dark corners, and big mammals roaming the oceans. They are extremely diverse and have conquered almost every part of this planet. However, there is one type of mammal that has really taken things to the next level. This animal looks down on other mammals as it soars through the sky. It competes with birds and insects for domination of the heavens. This edition of *Bas en zijn beestjes* will discuss the remarkable ascend of the bats.



Bats (Chiroptera) form an order within the class of mammals. With almost a thousand species, it constitutes one-fifth of all mammal species. Of course, the most famous attribute of the bat is that it can fly. For this, it uses its enormously long and thin fingers. If we humans were built the same way, we would have fingers of around two metres, thinner than a pen. The order of bats is divided in two big families: Megachiroptera, which consist of the megabats who love tropical fruits, and the Microchiroptera, which make use of echolocation and are mainly insectivorous. During an average night, a bat makes up to 400.000 calls at

an intensity of 110 decibels. This is louder than an average pop concert. However, the frequency of this call is so high that we do not pick it up. The bat itself can, in fact, hear its own call and therefore, has the potential to damage its own ears. Luckily, bats found an ingenious trick to prevent this. When they are flying, bats close their ears with each stroke of their wings. They are then able to use the energy of the same wing stroke to push air through their larynx and produce the call. With the echo of these calls, bats can hear the size, direction and even density of objects nearby. This ability is extremely precise, as bats are able to “hear” a single strand of spiderweb a metre away from them.

Bats are often associated with vampires, which has given rise to the image of blood-sucking parasites that transmit diseases. However, this is not entirely true. While bats are linked to rabies transmission, less than ten people in the last fifty years got rabies after a bat bite. With that said, there are three species of vampire bats that do rely on a blood-based diet. However, they mainly feed on cows, horses, tapirs, and turkeys. If they were to go for a human, they would actually prefer the toes instead of the neck. Also, they do not suck blood. Instead they bite the victim and insert an anti-coagulant. After that they lick the blood that drips out of the wound. The anti-coagulant in their saliva is nowadays used as a medicine for treatments against strokes. This medicine is ironically named *Draculine*. Blood itself is not that rich in energy, and as such, the vampire bats need to drink blood every two days to avoid starvation. Luckily these species are very cooperative where a successful individual will feed another individual if needed. They even remember who helped them out previously when deciding whom to feed.

After their meals, bats produce droppings named guano. In one of the biggest caves of the world resides one of the biggest colonies of bats. They have, over the years, produced an actual mountain of guano over a hundred metres high. This guano is rich in saltpeter, which in turn is an important ingredient of gunpowder. The guano is also a good fertilizer and is rich in protein. Just over 100 grams of guano contains more protein and minerals than an average Big Mac.

Bats take up a special place in the order of mammals. They broke free from the shackles of the earth and rose up. And while most people see them as scary monsters creeping in the night, the Chinese see them as they deserve to be seen. In China, bats form a symbol of good fortune. The word *Fu* in Chinese can both mean “luck” and “bat”. I hope that by adding these creatures to my hall of fame it will give me some luck as well.

# Een scherp oog!



Een scherp oog voor goed ecologisch advies,  
betrouwbaar onderzoek en vakkundige analyse.  
Al ruim 30 jaar lang.

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# IDUZZLE...



By Juultje Eenink



hint:  
2nd half of the word



-do



-r, n=m



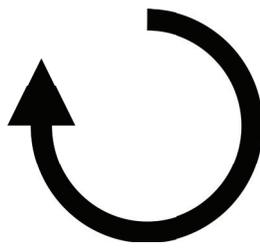
-t, -u



-ca



-c, -f



-clock



-da, -y



minus first letter



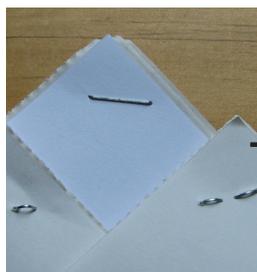
-p



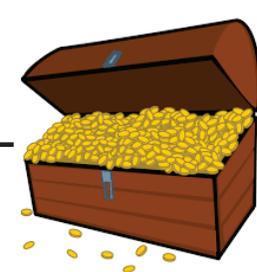
-in, -t



minus first and  
last letter



-sta



-tre



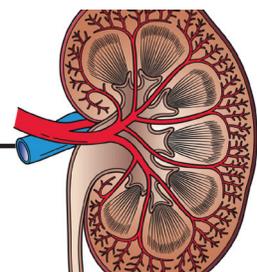
-t



-ngue



-johnny br



-k, -ney



-w



-tw, -s



The previous Iduzzle was won by **Marien Westerink**. Congratulations! He has won a marvellous prize, which he is very happy with! Would you like to be mentioned here in the next Lifeline? Please submit your answer to the Iduzzle to [redactie@idun.nl](mailto:redactie@idun.nl) before March 18<sup>th</sup>.

Answer to iduzzle 57: They are either coming or already among us.