



CREATING SURGICAL STORIES FOR OVER 35 YEARS

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Contents

WELCOME TO THE WORLD OF VET CANDY Let's talk surgery stories!

DR. TOMAS: INFERNUSO'S LIFE IN THE OR Meet the Italian surgeon who's making the world a better place.

ARE YOU TAKING GOOD CARE OF YOUR **SURGICAL INSTRUMENTS?** Check out these expert care tips.

WHY SOME FRIENDS MAKE YOU FEEL MORE SUPPORTED THAN OTHERS

Who do you call first when the going gets 8

ARE YOU GETTING ENOUGH SLEEP? Getting adequate sleep makes a huge difference.

DID YOU EVER WONDER WHAT YOUR SURGICAL INSTRUMENTS ARE MADE OF? They aren't all made equally! **13**

HOW TO MINDFULLY APPRECIATE NATURE More than tree hugging, try this out! **15**

HOW TO PICK SURGICAL INSTRUMENTS Choose the best every time with these tips.

THE JOY OF GARDENING An herb garden is a wonderful way to dip your toe into gardening. 19

WHEN YOU'RE SMILING, THE WHOLE WORLD REALLY DOES SMILE WITH YOU From Sinatra to Katy Perry, celebrities

have long sung about the power of a smile. FIVE TIPS TO STAY MOTIVATED

Maintaining motivation is becoming an increasing challenge for us all.

VET CANDY

LIFE IN THE OR

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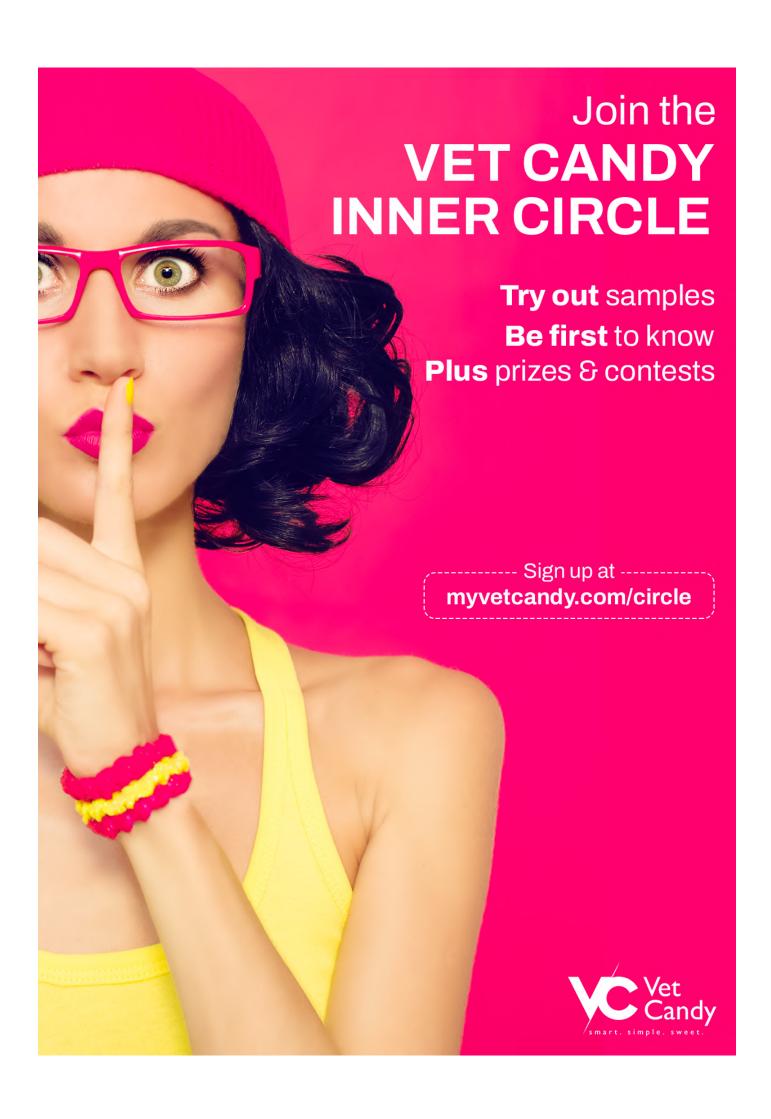




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11

24



Welcome To The World Of VET CANDY

Dr. Jill Lopez, Editor in Chief

ne thing I know for certain about veterinary professionals is that every one of us has a surgery story. Sometimes, it is the first time you held a hemostat in your hands or sutured skin on a live patient instead of a practice pad.

What's my surgery story? Early in my career, I was an associate veterinarian at a small clinic and it was a Friday night. I had tickets to an Alan Jackson concert and I was just heading out the door when I received a frantic call from one of my clients who had a pug in dystocia. There wasn't an emergency clinic in the area so, I knew I would be missing the concert for sure.

The pet owners arrived and I got to work quickly sedating her. I was so nervous but I felt a rush of adrenaline when each puppy was handed to my assistant to rub and revive. All in all, Wednesday the pug had six healthy puppies. Nothing in this world is cuter than pug puppies...absolutely nothing!!

Although I missed the concert, from that moment on, anytime I hear an Alan Jackson song, I can't help but think of Wednesday and her puppies and how nervous I was that night.

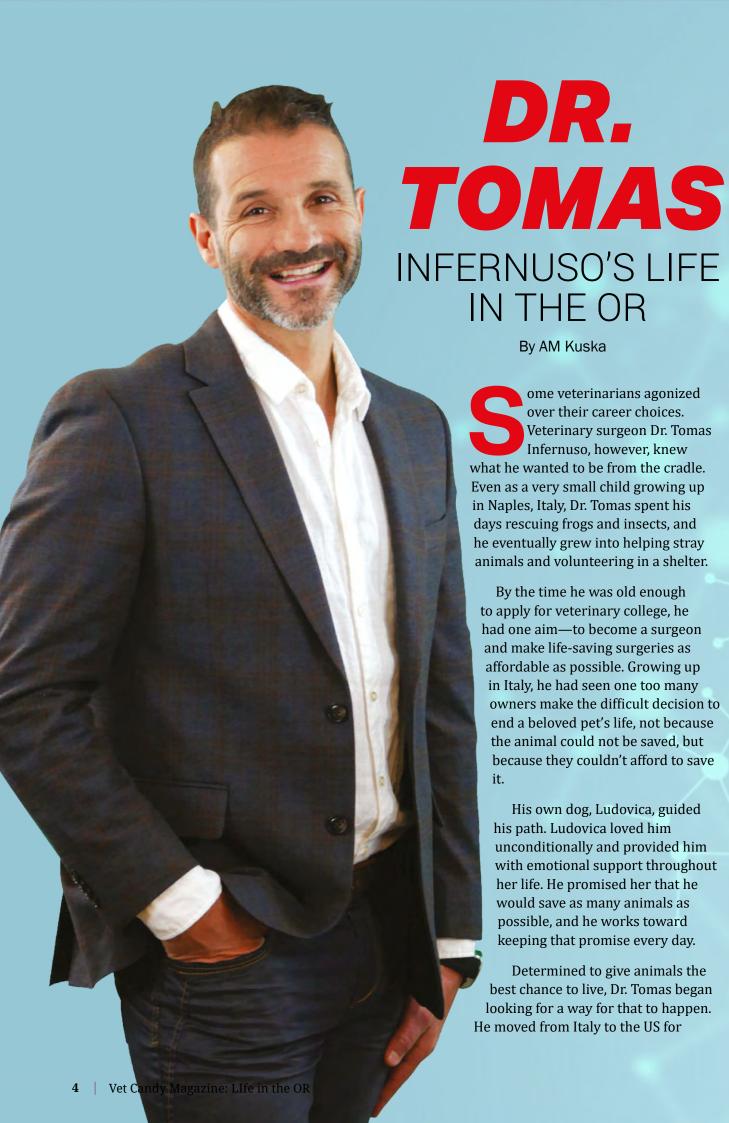
What about you? Do you have a surgery story you would like to share? Tell us your story for a chance to win some great prizes, including FIGS gift cards, courtesy of Veterinary

Instrumentation. Simply share you story and tag @myvetcandy #surgerystories to enter to win.

Check out myvetcandy.com/ rules for rules and regulations.

As always, I would like to thank my assistant editor, Shannon Gregoire, and our amazing team of writers. I hope you enjoy this issue.









SURGERY STORIES

"The first time I watched a surgery, I assisted with an emergency enucleation.

I watched as the surgeon severed the optic nerve and vessels and removed the damaged eye. I was simply amazed."

Tatiana Rogers, Class of 2023, Colorado State University

Are You Taking Good Care Of Your

SURGICAL INSTRUMENTS?

DR. SABA AFZAL

urgical instruments demand proper care to ensure their proper function and longevity. No doubt, you need to follow modern cleaning protocols to care for these valuable instruments.

Three factors directly affect the process of cleaning surgical instruments:

Time – Begin the process within 10 to 15 minutes after the procedure.

Temperature – For better cleaning action, use solutions at high temperature (80° F – 110° F).

Agitation – This helps to remove dust or soil from the instruments; it may be ultrasonic or manual.



Step-By-Step Cleaning Protocol

Pre-cleaning

Don't let your surgical instruments dry after the surgery. Use a wet towel to cover the instruments immediately after performing surgery. Pre-cleaning formulations are also available.

Washing

Wash the instruments by using a soap with a neutral pH. Hand scrubs or betadine may cause corrosion or spots on instruments, so avoid them. Special brushes are available—try them.

Ultrasonic cleaning

It is best to use ultrasonic cleaning (if available) to avoid cross-contamination. You need to place surgical instruments in the ultrasonic unit for 15 to 20 minutes. Don't forget to use a detergent with a neutral pH.

Rinsing

Rinse the surgical instruments immediately after the ultrasonic cleaning. Always use warm or normal water for better results.

Drying

The next step is drying. First remove the excess water by blotting with a towel. Avoid air drying. Avoid air drying, which may leave spots on the instruments.

Lubrication

Lubricate the instruments after the drying process. Don't use a milk bath that may support the growth of bacteria. Moreover, silicone or mineral-based lubricants may complicate steam sterilization.

Sterilization

The basic principle of sterilization is that ratchets and hinges must be open during sterilization for better steam penetration. If using a tray or a pan, make a reasonable choice.

Delicate or lighter instruments should be on top of the heavy ones. If you use plastic pouches, make sure not to stack them on each other in the sterilization chamber.

How To Differentiate Between Rust And Stains?

If you observe any discoloration on instruments, use a pencil eraser to nd its source. The appearance of a pit after erasing the color will con rm the occurrence of corrosion. Otherwise, it is only a stain that you can remove easily.







t's good to have friends and family to back you up when you need it, but it's even better if your supporters are close with each other, too, a new set of studies suggests.

Researchers found that people perceived they had more support from a group of friends or family who all knew and liked each other than from an identical number of close relationships who were not linked.

The results suggest that having a network of people to lean on is only part of what makes

social support so beneficial to us, says David Lee, who led the study as a postdoctoral fellow in psychology at Ohio State University.

"The more cohesive, the more dense this network you have, the more you feel you can rely on them for support," said Lee, who is now an assistant professor of communication at the University at Buffalo. "It matters if your friends can depend on each other, just like you depend on them."

Lee conducted the study with Joseph Bayer, assistant professor of communication, and Jonathan

Stahl, graduate student in psychology, both at Ohio State. Their research was published online recently in the journal Social Psychology Quarterly.

The researchers conducted two online studies.

In one study, 339 people were asked to list eight people in their lives that they could go to for support in the last six months. Participants rated on a scale of 1 to 7 how much support they received from each person.

(Most were listed as friends or family members, but some people also named co-workers, romantic partners, classmates, or roommates.)

Crucially for this study, participants were also asked to rate on a scale of 1 to 7 how close each possible pair of their eight supporters were to each other (from "they don't know each other" to "extremely close.")

Based on those answers, the researchers calculated the density of each participant's network—thecloser and more interconnected their friends and family were to each other, the denser the network.

Results showed that the denser the networks, the more support the participants said they would be able to receive from them.

"People who feel they have more social support in their lives may be focusing more on the collective support they feel from being part of a strong, cohesive group. It's having a real crew, as opposed to just having a set of friends."

A second study, involving 240 people, examined whether the

density of a social network mattered in a specific situation where people needed help.

In this case, participants were asked to list two different groups of four people they could go to if they needed support. One group comprised four people who were not close to one another, and the other

66

We found

that our

support networks are more than the sum of their parts group consisted of four people who were close with each other.

Participants were then asked to imagine a scenario in which their house had been broken into and they went to their network for support.

Half the people were told to think about going to the four people who were not close to one another, while the other half imagined reaching out to their four connected supporters.

Results showed that those who imagined going to their tight-knit group of friends or family perceived that they would receive more support than did participants who thought about going to their unconnected friends.

The results also offered preliminary evidence of two psychological mechanisms that could help explain why people feel better supported by a tight-knit group of friends.

In answers to survey questions, participants

sug-gested that they thought of their group of close friends or family as one entity. They also were more likely to see a closer-knit group as part of their own identities. Both of these factors were related to perceiving more support, results showed.

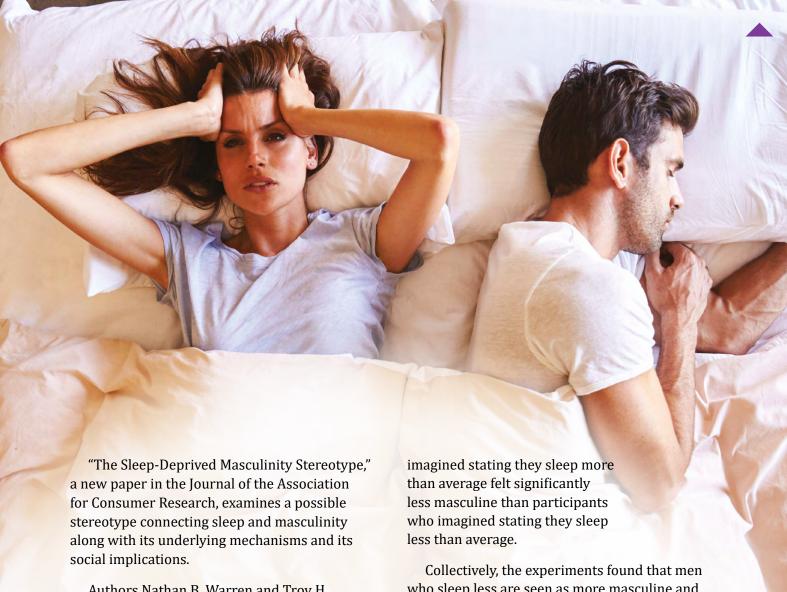
The researchers said the results of both studies show it isn't just the number of friends and family you have in your network that is important. "You can have two friends who are both very supportive of you, but if they are both friends with each other, that makes you feel even more supported," Stahl said.

On a practical level, that means it is important which friends we think about when we most need help or when we are feeling lonely in the midst of daily life. "Focus on those friends who are connected to each other," Bayer said. "That's where we really perceive the most support."









Authors Nathan B. Warren and Troy H. Campbell conducted twelve experiments involving 2,564 American participants to demonstrate that a sleep-deprived masculinity stereotype exists.

In one experiment, participants were asked to imagine a man shopping for a bed. A salesperson asked the man, "How much do you normally sleep?" The results found that the mean masculini-ty rating for participants in the lots-of-sleep condi-tion was significantly lower than the mean masculinity rating for participants in the little-sleep condition.

In another experiment, participants were asked to ascribe different attributes to a male character, either a "very masculine and manly" man or a "not very masculine and not very manly" man.

Participants in the masculine condition described their character getting 33 fewer minutes of sleep per night than the characters described in the not-masculine condition. A final experiment showed that participants who

Collectively, the experiments found that men who sleep less are seen as more masculine and are judged more positively by society. The same patterns were not consistently observed for perceptions of women.

"The social nature of the sleep-deprived masculini-ty stereotype positively reinforces males who sleep less, even though sleeping less contributes to significant mental and physical health problems," the authors write. This may be particu-larly detrimental because men frequently have significantly more negative attitudes towards seeking psychological help. "Unfortunately, the problems created by the sleep-deprived masculini-ty stereotype may reach beyond individuals and into society, as men who sleep less are found to be more aggressive and violent." This is an example of the restrictive and toxic characteristics of masculinity, "which can be harmful to men's health and society at large."

The bright side of this research, the authors say, is that "as society continues to challenge traditional definitions of masculinity, attitudes toward sleep may become more positive, and all people might enjoy more nights full of healthy

DID YOU EVER WONDER WHAT YOUR

Surgical Instruments Are Made of?

Dr. Saba Afzal

et's take a look at the most commonly used metals for surgical instruments.

Stainless steel instruments

One of the extraordinary properties of stainless steel is its ability to withstand high temperatures like 750° F. Stainless instruments easily bear the high autoclave temperature, 356° F, during sterilization.

Moreover, stainless steel resists corrosion and imparts longevity to surgical tools.

Just like carbon steel, stainless is also hard-wearing and tough, maintaining conforma-tion.

Ammun 1

Austenitic 316 is

the best example of a steel that highly resistant to corrosion and is commonly known as surgical steel.

Austenitic 301 is the steel of choice to make springs for several surgical tools.

Tantalum, a metal for orthopedics

Tantalum has extraordinary strength with a high melting point near about 5400° F. It has high biocompatibility that makes it attractive for ortho-pedic use.

It is a highly resistant metal against corrosion and also shows inertness towards body fluids. It's widely used in surgical procedures to avoid side effects. Due to its inertness and corrosion-resistant prop-erties, it is used to replace bones in prostheses. Moreover, it can mold into any desirable shape, which also makes it an attractive material.

Palladium and platinum tools

These metals are expensive but have tremendous properties for precision surgical applications. They are suited for applications as stents and catheters due to their ability to mold into wires of ultra-thin size.

Surgeons use them as markers because they are visible in radiography.



Titanium finds its application in orthopedic plates, pins, and rods due to its biocompatibility properties. Titanium possesses an intrinsic

Read more by clicking on the link:

Click Here



quali-ty that makes it fuse well with bones.

Titanium instruments are highly heat-resistant, even more than stainless steel.

The selection of surgical instruments is made based on their functions and their manufacturing material. Don't make wrong decisions in this regard, and always use instruments of the best quality.





SURGERY STORIES

"I was so nervous the first time I performed a surgery, my hands were sweaty beneath the gloves. I just closed my eyes and took three long breaths and I knew I could do it,"

Yamilex Rodriguez, Texas A&M Class of 2023



Think about your relationship to the natural world.

You're not just in nature; you are a part of nature. When you walk through a forest, you are carrying small bits of pollen and seed around, helping to do nature's work. Bacteria lives on and in you, in thriving colonies that depend on you for survival.

When we think about how we are part of the natural world, we can feel more attuned to it. We're not separate from nature, we are an intrinsic part of it.

Notice growth.

Look around you while you are on your hike. What is growing? Notice the new needles

at the tips of a pine bough, the sapling struggling to reach the sunlight, the lichen spreading across bark. By noticing what is living, you can better appreciate the life.

Pay attention to your surroundings.

Listen to the bird calls,

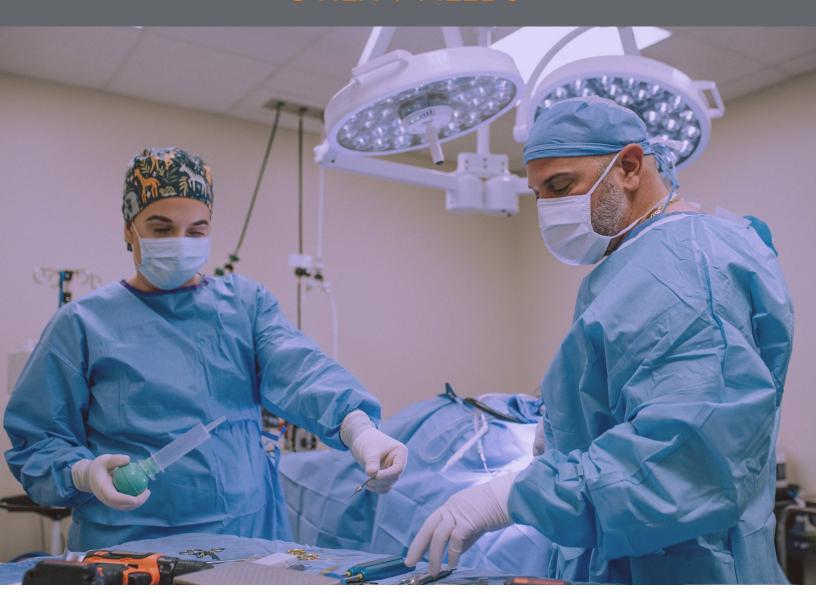
or if you're at a beach, the sound of the waves. Look not just at the colors, but the shades. By paying attention to every detail, you will be more appreciative of the beauty around you. Mindfulness can be used almost everywhere, and mindfully appreciating nature can help you get the most out of your outdoor time. Read more about being mindful below: Four ways to mindfully appreciate nature



Reach for Vi instruments

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HOW TO PICK SURGICAL INSTRUMENTS

DR. SABA AFZAL

he selection of appropriate surgical instruments depends upon the type of procedure, frequency of usage, and subject size. Keeping these points in mind will help you select the right instrument.

Surgical instrument types

- Generally, surgical instruments are loosely cate-gorized based on their function. These instruments may be used for:
- Cutting Scissors, scalpels, knives, and surgical blades, etc.
- Grasping Tissue forceps and hemostatic forceps, etc.
- Retraction Weitlaner and Gelpi retractors, etc.

Several accessory instruments are also a major part of routine surgical procedures. These include clamps, bulldog clamps, binocular loupes, drills, vessel clips, towel clamps, biopsy punches, etc.

Instruments for cutting

The most common surgical instruments for cutting purposes are scissors. Different sizes, structures, and lengths are available, depending upon the need.

Vannas scissors - These are delicate scissors with spring, important for neurosurgical and ophthalmic procedures.

McPherson-Vannas scissors - Used for intricate work like ophthalmological surgeries; they have fine blades.

Castroviejo scissors - Most commonly used to cut delicate tissue without any damage during ophthalmological procedures.

Moreover, scissors with curved tips or fine tips also have their applications depending on the situation.

Grasping instruments

The most common instruments for grasping in different surgical procedures are surgical forceps. They have different shapes and structures. Surgical forceps have two overall types, which are specially designed for particular functions.



Ring forceps

These are also known as locking forceps or hemostats because they exert traction to stop blood flow from a vessel. Here are their types:

Kelly hemostats - For clamping larger vessels

Hartman mosquito forceps – For clamping small vessels or holding sutures

Rochester-Oschner forceps - Heavy, with teeth, used for large vessels

Rochester-Carmalt forceps - For clamping large tissues and vessels or ligating pedicles

Rochester-Pean forceps - Horizontal serration for holding large vessels and tissues

Thumb forceps

These forceps have applications in holding, grasp-ing, or manipulating tissue during procedures. The types are:

Adson forceps - Have teeth for holding delicate tissues

Bonney forceps - Best for delicate tissue work and tying sutures

Foerster forceps - Have an octagonal keyhole for better grip

Iris forceps - Have teeth and applications in ophthalmological procedures

Graefe forceps - Have six to eight teeth (in a horizontal row) for better grasping

Retractors

Retractors can hold a tissue or organ and expose the structures underneath.

Hand retractors - Must be held in the surgeon's hand

Self-restraining – Allow the surgeon to work freely

Wire retractors - Allow a hands-free operation

Read more by clicking on the link below:

Guide to surgical instruments







Plan where to put it.

Most herbs prefer full sun, which means they need to be in a location with no shade for at least eight hours. Soil is just as important as sunlight. The soil should drain well but not be too sandy. A good way to check is to take a handful of moist soil and squeeze it in your hand. If the soil holds together securely like clay and doesn't come apart, it's clay soil. If it breaks apart easily despite being moist, it is sandy soil. If it can be broken but tends to stay together, somewhere between sandy and clay, you have an ideal mix.

Amend your soil.

It's easiest to prepare your bed before there is anything in it. While you can add amendments after the herbs go in, and you probably will over time, it's easier to get amendments thoroughly mixed in with no plants. While only a lab test can tell you if there are prob-lems with your soil, you can and should add compost to your garden before adding any plants. Compost improves every type of soil. It will help sandy soil not to drain so fast and clay soil to be less heavy. If you already have a rich loam, it will add nutrients to that loam.

Plant after all danger of frost.

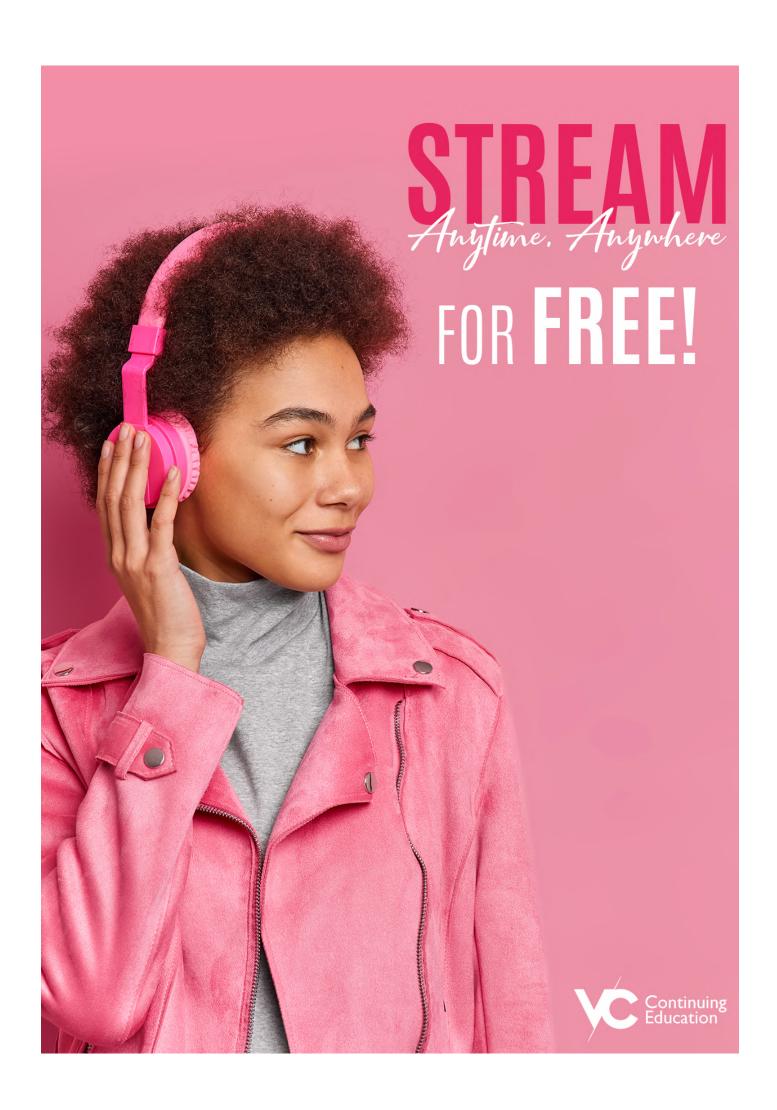
Some herbs such as basil are sensitive to frost and will die quickly if they are planted at a bad time. Check your zone and make sure you are planting after the last frost date.

How to plant

While you can start herbs from seeds, many people opt to get potted starts. If you do, loosen the soil below where you plan to plant so that







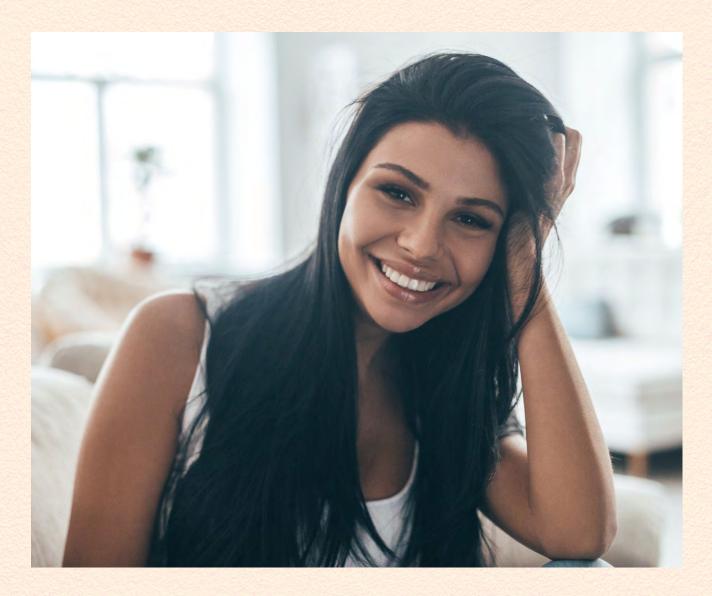


it picks you up, changes your outlook, and generally makes you feel better. But is it all smoke and mirrors, or is there a scientific backing to the claim?

Groundbreaking research from the University

simply by moving your facial muscles.

With the world in crisis amid COVID-19 and alarming rises of anxiety and depression in Australia and around the world, the findings could not be timelier.



The study, published in Experimental Psychology, evaluated the impact of a "covert smile" on perception of face and body expressions. In both scenarios, a smile was induced by participants holding a pen between their teeth, forcing their facial muscles to replicate the movement of a smile.

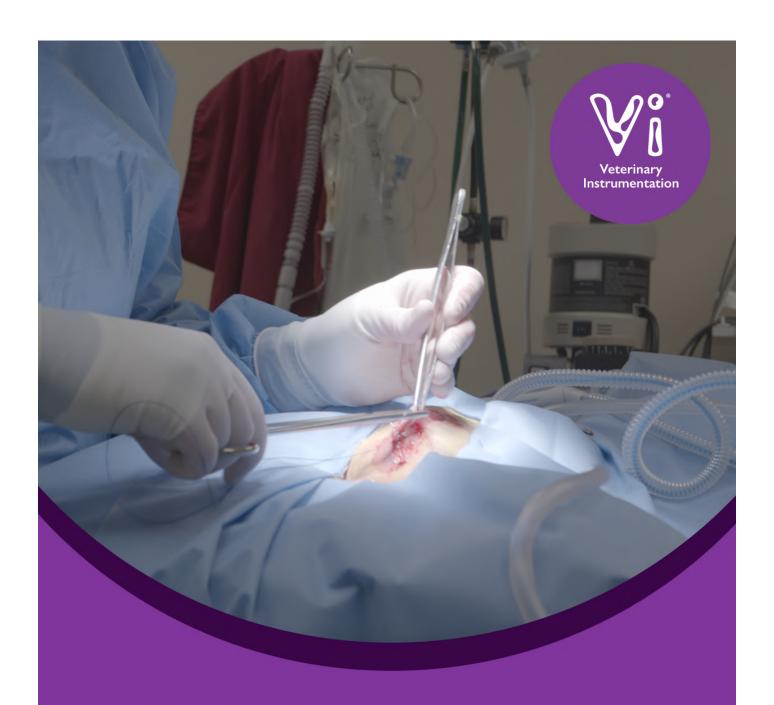
The research found that facial muscular activity not only alters the recognition of facial expressions but also body expressions, with both generating more positive emotions.

Lead researcher and human and artificial cognition expert, UniSA's Dr. Fernando MarmolejoRamos says the finding has important insights for mental health. "When your muscles say you're happy, you're more likely to see the world around you in a positive way," he says. "In our research, we found that when you forcefully practise smiling, it stimulates the amygdala—the emotional centre of the brain—which releases

neurotrans-mitters to encourage an emotionally positive state. For mental health, this has interesting implications. If we can trick the brain into perceiving stimuli as 'happy', then we can potentially use this mechanism to help boost mental health."

The study replicated findings from the "covert smile" experiment by evaluating how people interpret a range of facial expressions (spanning frowns to smiles) using the pen-in-teeth mechanism; it then extended this using pointlight motion images (spanning sad walking videos to happy walking videos) as the visual stimuli. Dr Marmolejo-Ramos says there is a strong link between action and perception.

"In a nutshell, perceptual and motor systems are intertwined when we emotionally process stimuli," Dr Marmolejo-Ramos says. "A 'fake it till you make it' approach could have more credit than we expect."



SURGERY STORIES

"I was so lucky during my first dog spay because I had excellent **veterinary technicians** to look after my patient and a surgeon that helped guide me through the procedure."

Shannon Gregoire, Class of 2022, Western University.



You make a difference

This didn't hit me until I felt my first wave of exam fatigue during midterms of

first year. You get so caught up in the whirlwind that is veterinary school and it can be easy sometimes to forget why you've taken this road when you're three exams deep and have four more left all in the span of eight days.

Always remember this – we save lives. Quite literally you may be the one person standing between life and death for your patients. Remember, animals will be lucky enough to have you on their side when they are not well.

Making mistakes are okay

We all mess up. It is okay and it is expected of you to not know everything right away, so ask questions! You can learn a lot from a failure, and your friends, family and colleagues are always there to help you. Be easy on yourself, perfection is not reality, and don't be afraid of mistakes, everybody makes them!

Obtain a growth mindset

Too often I catch myself, saying 'oh I'm not good at that'. This negative attitude

will get you nowhere. Instead, do the oppo-site with affirmations and also make time to catch up on learning. This allows you to acknowledge an area where you may lack confidence, but can also show-case that you are aware of it and working to improve your skills.

Give yourself breaks

You have worked so hard to become the best doctor you can be, but nothing happens overnight. It is easy to over work yourself and become fatigued.

Remember that medicine is a skill that must be learned and repeated many times to become proficient. It is okay, and neces-sary to take breaks to recharge. Taking small breaks will leave you feeling a renewed and ready to take on more information than if there are no breaks.

You are a human first

Don't forget that you are a human being with feelings, needs and interestsoutside of your career. Try to do one thing every day that brings you happiness with no connection to your profession. It could be working out, a Duolingo language session, Face-Timing family, or walking your dog. Whatever it is, enjoy the opportunity to be happy.

