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# UNRAVELING THE COMPLEXITIES OF CARDIOVASCULAR MEDICINE: A CONVERSATION WITH DR. PETER MCCULLOUGH (EXTENDED EN-US VERSION)

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NOTE: Version of the translation transcription. 1.0.

Dear friends, the interview transcription was done by machine and later reviewed. We are aware that it is imperfect. If you wish to collaborate with improvements, you are welcome to contact us southbchem@gmail.com

#### **ABSTRACT**

Background: This interview covers Dr. Peter McCullough's medical career, experience as an editor of medical journals, and his expertise in areas such as cardiomyopathy, myocarditis, and pericarditis. Aims: The primary aim is to understand Dr. McCullough's perspectives on various medical topics, including his journey as a cardiologist, the importance of peer review, the phenomenon of Pheidippides cardiomyopathy, the differences between myocarditis and pericarditis, and the significance of ethical principles like the Nuremberg Code and the Declaration of Helsinki. Additionally, the interview aims to explore his concerns about censorship during the COVID-19 pandemic. **Methods:** The interview follows a question-and-answer format, with the interviewer posing questions to Dr. McCullough on various topics related to his medical career, research interests, and ethical considerations. Results: Dr. McCullough shares his insights on topics such as cardiomyopathy, myocarditis, and pericarditis, emphasizing the importance of peer review, identifying potential biases, and balancing scientific rigor with timely dissemination of findings. He also highlights the significance of the Nuremberg Code and the Declaration of Helsinki in ensuring informed consent and preventing coercion in medical research and treatment. Discussion: Dr. McCullough expresses concerns about censorship during the COVID-19 pandemic, which he believes impacted the ability of medical professionals to freely discuss and disseminate health-related information. He also discusses the potential role of COVID-19 vaccines in causing myocarditis and the need for transparent communication about treatment options and potential complications. Conclusion: The interview provides valuable insights from Dr. McCullough's extensive medical experience and expertise, covering a range of topics from cardiovascular conditions to ethical principles and the challenges posed by censorship during the COVID-19 pandemic.

**Keywords**: Peter McCullough, Medical Ethics, Myocarditis, Pericarditis, Censorship.

**Luis:** Today, we have the honor of interviewing Dr. Peter McCullough.

Our interview will be published in Portuguese by the *Periódico Tchê Química* in English by the Southern Journal of Sciences, and we will share this interview with a local television station, Conecta Mais TV. The content of this interview will be shared under a Creative Commons license.

Dr. McCullough, thank you very much for this opportunity to speak with you. I would like to start our interview by asking about your medical career. Why did you become a cardiologist, and how did you get to where you are today?



Photo: Peter McCullough. 2024.

**Dr. McCullough:** Since I was young, I have always loved the idea of using science to help people, and medicine is the best combination of applying biological sciences and helping people through difficult times, illness, and prevention of hospitalizations and deaths.

I grew up in Texas. I am traveling through Texas by bus now, as you can see in the background.

I completed my undergraduate degree at Baylor University, followed by the University of

Texas Southwestern Medical School. I did my internal medicine residency in New York City, Washington, and Seattle. I did three years of rural health and the third year of public health and epidemiology training.

I continued my specialization in cardiology at the Oakland University William Beaumont School of Medicine and held academic leadership positions across the country in cardiology.

I maintained my board certifications in both internal medicine and cardiology, and I have published extensively on many topics. Thank you very much, Dr. McCullough.

**Luis:** To avoid delays, I'll move on to our next question.

Regarding your career as an editor of medical journals. How has your experience as an editor of prestigious medical journals influenced your approach to assessing research and scientific evidence?

**Dr. McCullough:** The peer review process is fundamental to the advancement of clinical science and certainly to medical progress, and we rely on the peer review process. I have been a manuscript reviewer for over three decades.

I have served as the editor-in-chief of two widely read journals: Reviews in Cardiovascular Medicine and Cardiojuvenil Medicine. These are longstanding positions. I am still a very active reviewer of various manuscripts today. This means that I have truly seen and examined more evidence and more data, as well as interpreted the information.

Under my supervision as an editor, **I have never retracted an article. N**ever. Peer review process, and we rely on it. I may not agree with every article published, but my agreement is not what matters. What matters is the formal scientific evaluation of the peer review.

As an author, I have nearly 700 citations, now listed in the National Library of Medicine and PubMed.

I have published over a thousand medical communications overall, and I continue to be very active in academic medicine.



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Image: McCullough's Publications.
Image source: https://scholar.google.com/citations?view\_op=list\_works&hl=en&hl=en&user=LzqEaOkAAAAJ

Luis: Very good. Thank you.

What are some of the biggest challenges you face in ensuring the integrity and quality of research published in the field of medicine?

**Dr. McCullough:** One of the greatest threats to validity is what is considered investigator bias. This is the bias of the authors of the manuscripts being published. They may be biased by their sources of funding, whether federal, private, or pharmaceutical industry sources. They may be biased according to the treatments they have taken as individuals.

We have seen this really manifest now in the COVID-19 vaccine crisis, which we will cover later. However, investigator bias, that is, the bias of the article authors, is very, very important to assess. That is why we ask for disclosures, to interpret conflicts of interest.

Of course, there are many other threats to validity, including bias at the level of reviewers, editors, and publishers, and hopefully, the peer review process takes care of that.

We have various forms of study bias and funding issues with internal and external validity,

biological plausibility, and all of that we use in this peer review process to help the scientific community and the general public arrive at this scientific truth.

**Luis:** Thank you very much, doctor.

My last question regarding your work as Editor.

How do you balance the need for scientific rigor with the importance of disseminating potentially innovative findings in a timely manner?

**Dr. McCullough:** The peer review process is slow and laborious, and one of the things that has emerged during the pandemic, which I think is a positive development, is the use of preprint servers. This is the publication of data, widely disseminated before peer review. Preprint servers explicitly inform the reader that the information has not been peer-reviewed. We tend not to give much weight to the author's conclusions, but simply want to see the data in tables and figures. This allows for almost immediate dissemination of information. Recently, many reputable journals have a preprint option that allows information to be released in preprint. Many journals have last-minute clinical trials or expedited review processes. All are important for getting information out quickly, but I want people to understand that often the peer review process for a fully revised manuscript can take up to two years.

Luis: Perfect.

I love that perspective.

**Dr. McCullough:** Thank you very much.

**Luis:** If you allow me, I'd like to ask about your expertise in Pheidippides cardiomyopathy. Could you explain this phenomenon and its connection to your research interests?

**Dr. McCullough:** Personally, I have been a marathon runner for many years, so I became interested in this issue of sudden cardiac death among marathoners.



Image: Phedipedes.

Image Source: Gerado com IA  $\cdot$  24 March de 2024 às 9:06 AM. Ideoagram.

Phedipedes was the Greek herald who ran a tremendous distance between two cities during one of the wars that influenced Greece. Now, it turns out he ran much more than a marathon. A marathon is 42.195 kilometers (26.2 miles). He probably ran about 115 kilometers (72 miles) and then died of exhaustion. In fact, he collapsed to his death, and that's Phedipedes.

But, we've observed elite marathon runners suffering cardiac arrest, and there have been detailed studies of cardiac magnetic resonance imaging and biomarkers, and we've published many articles on this. And suffice it to say there may be a genetic predisposition.

A marathon is extreme stress for the body, and there are elevations in inflammatory factors and other markers of cardiac stress.

And actually, the part of the heart that is likely affected is the right ventricle.

There's probably chronic volume overload over about two to four hours that in some individuals, this right ventricular stretching can precipitate ventricular tachycardia that degenerates into ventricular fibrillation.

So, I'm interested in walking and running training techniques and other measures to help people avoid this complication because it's not a general heart disease or a cold coronary disease. In fact, it's a marathon-induced form of right

ventricular cardiomyopathy.

**Luis:** Is it possible to prevent or treat it or does it happen when it happens?

**Dr. McCullough:** No, I think it's probably possible to prevent it with different training techniques.

We also want to understand the predisposing factors. And I think the main issue is that running marathons may not be safe for everyone. So, I want people to understand that running marathons, which is quite popular now, is not universally safe.



Image: Myocarditis representation.

Image Source:Gerado com IA  $\cdot$  29 de março de 2024 às 7:18 PM. Microsoft Copilot.

Luis: Perfect.

Regarding a new topic, myocarditis and pericarditis. My first question, I'm not a medical doctor. I'm a former chemistry professor. Could you describe the main differences between myocarditis and pericarditis and their possible causes and risk factors?

**Dr. McCullough:** Let's start with pericarditis, as it's more common. Pericarditis is the inflammation of the lining around the heart. The pericardium has two layers, one layer on the outer surface of the heart, and then it's a sac in the central part of the chest called the mediastinum.

And inside, there is fluid. The pericardium

can become inflamed, and this can be due to virus, various viruses like the coxsackie adenovirus, and occasionally influenza virus. It's also idiopathic, meaning we don't know what causes it. It's characterized by pain when breathing deeply and lying down. We can see obvious changes on the ECG and see fluid around the heart on an ultrasound. Then, it's treated with a main medication called colchicine, which is now the standard of care. It's a unique antiinflammatory that interferes with the formation of microtubules in granulocytes, which inflammatory cells present in the pericardial space and pericardial tissue. Idiopathic or post-viral pericarditis may predispose the patient to recurrent pains and sometimes adhesive and constrictive pericarditis. So, treatment is important and should probably be carried out for about a year. This has now been well-studied in clinical trials.



Image: Induced myocarditis representation.

Image Source: Gerado com IA  $\cdot$  29 de março de 2024 às 7:25 PM. Microsoft Copilot.

Myocarditis is the inflammation of the heart muscle itself. Myocarditis before the pandemic could be caused by parvovirus or other viral infections. And again, sometimes it's idiopathic.

There's a specific fatal form of myocarditis called giant cell myocarditis that doctors specifically perform a cardiac biopsy to try to diagnose, as these patients almost certainly need a heart transplant.

So, our approach to myocarditis again

depends on the use of colchicine, in some cases corticosteroids, plasma exchange, IVIG, and then even in advanced cases, we can use various forms of immunosuppressants like rapamycin.

### **Nattokinase**

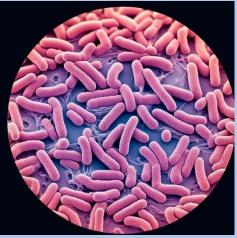


Image: Nattokinase representation.

Image Source: Gerado com IA · 24 de abril de 2024. às 9:25 AM. Microsoft Copilot.

Nattokinase, an enzyme renowned for its cardiovascular benefits, originates from natto, a traditional Japanese fermented soybean dish. Natto is created by fermenting soybeans with Bacillus subtilis var. natto, resulting in a distinct texture and aroma. During fermentation, this bacterium produces nattokinase as part of its metabolism, enriching the natto with this enzyme.

To harness nattokinase for supplementation, natto undergoes processing to extract and concentrate the enzyme. This purification process isolates nattokinase from other components, yielding a potent extract. Regular consumption of nattokinase as a dietary supplement is favored for its potential to enhance cardiovascular health by promoting healthy blood circulation and clot dissolution.

Nattokinase supplements, available in various forms like capsules or powders, are marketed as natural cardiovascular support options. Despite its generally recognized safety, consultation with a healthcare professional is advised, especially for individuals with medical conditions or taking blood-thinning medications, due to potential interactions or effects on clotting times. Nattokinase's importance persists in scientific circles and among those seeking natural approaches to heart health.

We hope that in myocarditis, we avoid two main outcomes, which are the development of

heart failure or sudden cardiac arrest and sudden death, and so patients are carefully monitored.

I can say that in these conditions, often pericarditis and myocarditis occur together and can be severe and require joint therapeutic interventions, so we call it myopericarditis.

And again, before COVID, it was in all cardiology guidelines, guidelines, medical articles, and review articles that patients cannot be allowed to exercise because the increase in adrenaline with exercise in a patient with myopericarditis will precipitate cardiac arrest.

**Luis:** Regarding myocarditis, I recently saw the term. I believe it's "mild myocarditis". Is that possible?

**Dr. McCullough:** No, I don't think that's an appropriate term. We should take each case very seriously.

**Luis:** If someone has myocarditis, they have the risk of dying, correct?

#### Dr. McCullough: That's true.

And we learned that now with the pandemic, the COVID-19 respiratory illness in 2020 did not cause severe cases of myocarditis.

There were a handful of cases described in an article by Daniels and colleagues from collegiate athletic leagues and in community cases of COVID respiratory illness.

I saw a true case in my practice, and this was a case that required medical attention, including hospitalization and treatment, but with COVID-19 it's not common when patients are admitted with COVID-19 to the hospital an elevation in the cardiac component does not indicate myocarditis, that's not adjudicated myocarditis and it's this observation that led to a false narrative that myocarditis is common in infections.

What we know now is that COVID-19 vaccines often cause myopericarditis, this is in all FDA regulatory warnings, and in fact, COVID-19 vaccine myocarditis can present with cardiac arrest and sudden cardiac death.

# **Bromelain**



Image: Bromelain representation.

nage Source: Gerado com IA · 24 de abril de 2024, às 9:25 AM. Microsoft Copilot.

Bromelain, a potent enzyme derived from the stem and fruit of the pineapple plant (Ananas comosus), has a rich history originating from the tropical regions of South America, particularly in countries like Brazil and Paraguay where pineapples thrive. Traditionally, indigenous peoples recognized its medicinal properties, using it to treat various ailments like indigestion and inflammation.

Today, bromelain is extracted through a complex process involving crushing and juicing pineapple stems and fruit, followed by filtration and purification steps to isolate the enzyme. This concentrated form of bromelain is then utilized in various industries, including pharmaceuticals, cosmetics, and food processing.

Bromelain is available in supplemental forms such as capsules, tablets, powders, and liquids, known for its potential anti-inflammatory, digestive, and immune-supporting properties. It aids in reducing inflammation, improving protein digestion, and even tenderizing meat in culinary applications.

Whether consumed as a supplement or enjoyed through pineapple consumption, bromelain offers diverse health benefits, enriching both our health and culinary experiences. However, it's essential to consult with a healthcare professional before incorporating bromelain into your routine, ensuring safe and effective use.

**Luis:** Doctor, I'm sorry, I'll hurry our interview. I'll move on to the next topic, okay?

Regarding the Nuremberg Code and the Helsinki Declaration, again, I'm not a doctor, and this is not familiar to me. Could you explain the significance of the Nuremberg Code and the Helsinki Declaration in the context of medical ethics and research involving human subjects? Also, I would like to know if they are still valid today.



**Image**: Blood test representation.

Image Source: Gerado com IA  $\cdot$  30 de março de 2024 às 9:25 PM. ImageFX.

Dr. McCullough: They are the cornerstones of medical ethics regarding research and the use of innovative treatments or drugs. One of the cornerstones is the Helsinki Declaration, which states that every person deserves full, free, and informed consent, fully understanding the risks and potential benefits of participating or not participating in research or not taking a new product. And then the Nuremberg Code, which arose from the Nuremberg trials after the fall of Nazi Germany, where individuals in Germany were forced into unsafe and unethical research conducted by Nazi doctors, in the Nuremberg Code, the first item is an important statement and it says that 'The voluntary consent of the human subject is absolutely essential.'

There must be free choice, and there must be no threat to that individual in any way.

**Luis:** So, should the practice of coercing people to participate in medical trials be avoided?

Dr. McCullough: It should be prohibited.

## Curcumin



Image: Curcumin representation.

nage Source: Gerado com IA · 24 de abril de 2024. às 9:25 AM. Microsoft Copilol

Curcumin, the active compound in turmeric (Curcuma longa), traces its origins to the vibrant cultures of South Asia, notably India, where turmeric has been esteemed for its medicinal properties for millennia. Harvested from the rhizomes of the Curcuma longa plant, turmeric undergoes a meticulous process: washed, boiled, dried, and ground into a fine powder, rich in flavor and color. Within turmeric lies curcumin, the bioactive compound responsible for its renowned health benefits.

To extract curcumin, turmeric undergoes solvent or supercritical fluid extraction, followed by purification to isolate curcuminoids. This yields concentrated curcumin extracts used in supplements like capsules, tablets, powders, and liquid forms. Known for its potent anti-inflammatory and antioxidant properties, curcumin is studied for managing arthritis, cardiovascular issues, and certain cancers. It also enriches culinary traditions, enhancing both flavor and color in dishes.

From its sacred origins in South Asian cultures to its modern medicinal and culinary applications, curcumin fascinates with its rich history and health-promoting properties. However, its low bioavailability prompts the inclusion of compounds like piperine or specialized delivery systems in supplements. Consulting a healthcare professional before integrating curcumin into one's routine is advisable, particularly for those with medical conditions or taking medications.

**Luis:** Yes, prohibited. A much better term. Thank you.

I'm having a great class today with you. Thank you.

If you allow me to delve a little deeper, thank you. I would like to ask another question.

I saw some research commenting on an image that I believe I saw on your website, okay? It's about the use of bromelain, nattokinase, and curcumin. Could you talk a little about this? How can this improve conditions?

**Dr. McCullough:** The McCullough Protocol: Spike Protein Detox (BSD), which is now a trademark in Europe, and has a pending patent application in the United States, is a breakthrough.

Two publications in the Journal of American Physicians and Surgeons and in the Biomedical Sciences Journal of Springer Nature, Curious Journal, made this proposal based on preclinical and clinical data that nattokinase derived from fermentation, enzyme, soy bromelain, which is a family of enzymes derived from pineapple stems, and then curcumin, which is an anti-inflammatory derived from turmeric, all available in supplement form in capsules, work together to help degrade the S protein, which is the harmful part of viral infection, the backbone on the virus surface. It's also the dangerous part of the product protein that's in COVID-19 vaccines or is produced from genetic vaccines in an uncontrolled infection that accumulates in the body. This nattokinase, 2,000 units twice a day, bromelain 500 milligrams per day, and curcumin 500 milligrams twice a day as an initial program is a reasonable detox approach for a minimum of three, often up to 12 months, to help reduce the S protein burden in the body and hopefully decrease symptoms and reduce the risk of severe complications.

**Luis:** One more brief question. People talk about clots forming and blood tests, 'D-dimer,' I believe it is. How do they relate? And can these clots be dissolved in the body or never again?

**Dr. McCullough:** D-dimer has been found to be an indicator of micro and macro thrombosis precipitated by the S protein, both in natural infection and in patients who have received the vaccine. So, I routinely measure D-dimer in both post-infection and post-vaccine patients. When it's

elevated, the interpretation is that it indicates microthrombosis.

## **D-dimer**



Image: D-dimer blod test representation.

The D-dimer blood test is a crucial diagnostic tool for assessing blood clotting disorders. D-dimer, a protein fragment produced during clot breakdown, indicates clotting events in the body. Typically drawn from an arm vein, blood samples undergo laboratory analysis, where various methods, like ELISA, detect D-dimer levels.

Elevated D-dimer suggests clot presence, guiding diagnosis for conditions such as deep vein thrombosis (DVT) or pulmonary embolism (PE). Conversely, normal levels help rule out significant clotting disorders, reducing the need for invasive tests.

However, D-dimer elevation isn't exclusive to clots; it can occur in pregnancy, surgery, trauma, inflammation, or cancer. Thus, the test complements clinical assessments to ensure accurate diagnosis.

By aiding diagnosis and management, the D-dimer test improves patient care and outcomes. It's particularly valuable in ruling out clots when results are normal. This comprehensive approach enhances decision-making, reducing unnecessary testing and ensuring efficient treatment.

It's a call, at minimum, for the use of aspirin. I think it's an excellent call for the use of nattokinase and bromelain. And then, in some patients who actually have detectable thrombosis by ultrasound or imaging, we add more serious anticoagulants, including direct oral

anticoagulants or warfarin.

**Luis:** Thank you very much, doctor.

We are approaching the final round of questions, and I would like to ask about censorship in the United States and abroad.

From your point of view, how has the issue of censorship impacted the ability of medical professionals and researchers to freely discuss and disseminate information related to public health matters, both in the United States and internationally?



**Image**: Censorship representation.

Image Source: Gerado com IA  $\cdot$  30 de março de 2024 às 8:25 PM. ImageFX.

Dr. McCullough: Intentional censorship practiced by governments worldwide through complicit media, including social media. Bringing public truth about multidrug early therapy for COVID-19 and vaccine safety has cost a large number of lives. Effectively, censorship has killed people worldwide. The public deserves the opportunity to always learn about new advancements on how to prevent hospitalizations and deaths from COVID-19 and how to treat, manage, and avoid vaccine injuries, deficiencies, and deaths. And censorship has been targeted against any hope of people obtaining treatment or avoiding complications. Censorship has actively promoted endless mass vaccinations, and it's now on trial in the US Supreme Court in the case of Missouri versus Biden. The Supreme Court heard this case last week, and I can say it will likely take a month or

two to deliberate and get a response. But it is known that the US government is within social media and mainstream media, and the Supreme Court will decide whether to allow the government and its agents to remain with their influence or to withdraw the government from the media so that scientists and doctors can have uncensored free speech. I think it's a critical case, and we will keep you updated on the outcomes.

**Luis:** Just for the record, today is March 22, 2024, so we can have a follow-up for the future.

Regarding the issue of censorship, I imagine highly qualified professionals like yourself would never be censored. Have you ever experienced anything like this?

**Dr. McCullough:** For decades, I studied the interface between heart and kidney diseases. I published as I am doing now, gave lectures, and appeared in a variety of media. I testified before Congress's Oversight Panel before the pandemic. I have never seen censorship in my career until the COVID-19 pandemic arose. And the pandemic brought unprecedented actions taken against scientists like me. I am deeply concerned that all the actions that have occurred regarding censorship and retaliation have harmed innocent civilians, to harm the public worldwide, created fear, suffering, hospitalization, and death.

And we must all come together to end this censorship and allow people like me and people in my circle to bring the truth to you.

**Luis:** Doctor, it was a pleasure speaking with you.

I know you are an extremely busy man. On behalf of the newspapers I am representing, I would like to say thank you very much. It was a great opportunity.

We hope to have the chance to speak with you again in the future.

Dr. McCullough: Thank you.

**Luis:** Thank you very much. It was a pleasure.

#### **DECLARATIONS**

**1. Limitations:** The interview is limited to its content.

- **2. Funding source:** The host funded this interview.
- **3. Competing Interests:** The host has worked for the journal for many years, and this may have influenced the interview.
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To know more, visit: <a href="https://McCulloughfnd.org">https://McCulloughfnd.org</a>

https://scholar.google.com/citations?user=LzqEa OkAAAAJ&hl=en



#### Conference invitation.

Visite o site da Second Southern Science Conference que será realizada nas belas cidades de Mendoza, na Argentina, e Vassouras no Brasil, de **7 a 9 de novembro de 2024**. https://www.sscon.org/

# **Confirmed speakers**



Dr. McCullough is an internist, cardiologist, epidemiologist holding degrees from Baylor University, University of Texas Southwestern Medical School, University of Michigan, and Southern Methodist University. He manages common infectious diseases as well as the cardiovascular complications of both the viral infection and the injuries developing after the COVID-19 vaccine in Dallas TX, USA. Dr. McCullough has broadly published on a range of topics in medicine with > 1000 publications and > 685 citations in the National Library of Medicine. His works include "Pathophysiological Basis and Rationale for Early Outpatient Treatment of SARS-CoV-2 (COVID-19) Infection" the first widely utilized treatment regimen for ambulatory patients infected with SARS-CoV-2 in the American Journal of Medicine and subsequently updated in Reviews in Cardiovascular Medicine. Subsequently he published the first detoxification approach titled "Clinical Rationale for SARS-CoV-2 Base Spike Protein Detoxification in Post COVID-19 and Vaccine Injury Syndromes" in the Journal of American Physicians and Surgeons. He has dozens of peer-reviewed publications on the infection and has commented extensively on the medical response to the COVID-19 crisis in TheHill, America Out Loud, and on FOX NEWS Channel. Dr. McCullough testified multiple times in the US Senate, European Parliament, Texas Senate Committee on Health and Human Services, Arizona Senate and House of Representatives, Colorado General Assembly, New Hampshire Senate, Pennsylvania Senate, and South Carolina Senate concerning many aspects of the pandemic response. Dr. McCullough has had years of dedicated academic and clinical efforts in combating the SARS-CoV-2 virus and in doing so, has reviewed thousands of reports, participated in scientific congresses, group discussions, press releases, and has been considered among the world's experts on COVID-19.

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