



Inflammation: The Cause of All Diseases?

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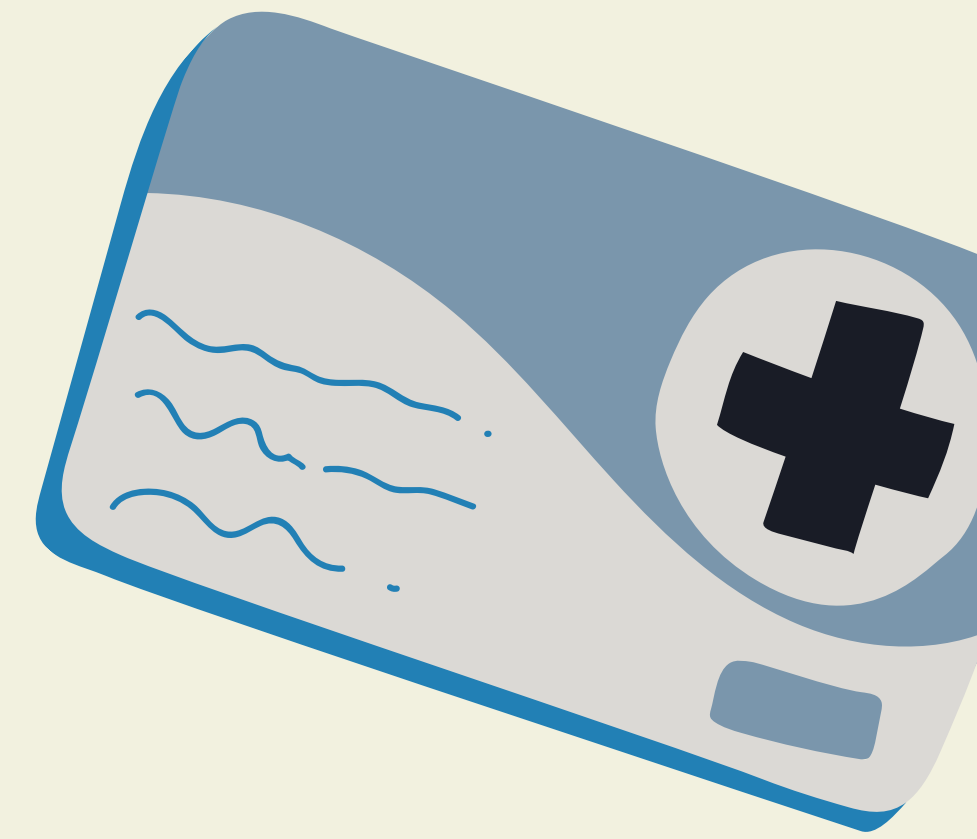
Content Outline

- 01** What is inflammation?
- 02** Inflammation and ageing: how they are linked?
- 03** Ageing Well



01 What is inflammation?

What is inflammation?



A fundamental biological response initiated by the body to protect itself from harmful stimuli, such as pathogens, damaged cells, and irritants.

Inflammation



Redness and heat



Swelling



Pain and
Loss of Function

A series of reactions that work together to eliminate the cause of cell injury, clear out damaged cells and tissues, and initiate tissue repair.

What is inflammation?



Acute inflammation

A vital and normal part of the body's defense mechanism



Chronic inflammation

A persistent and prolonged inflammatory response that can lead to various health issues.



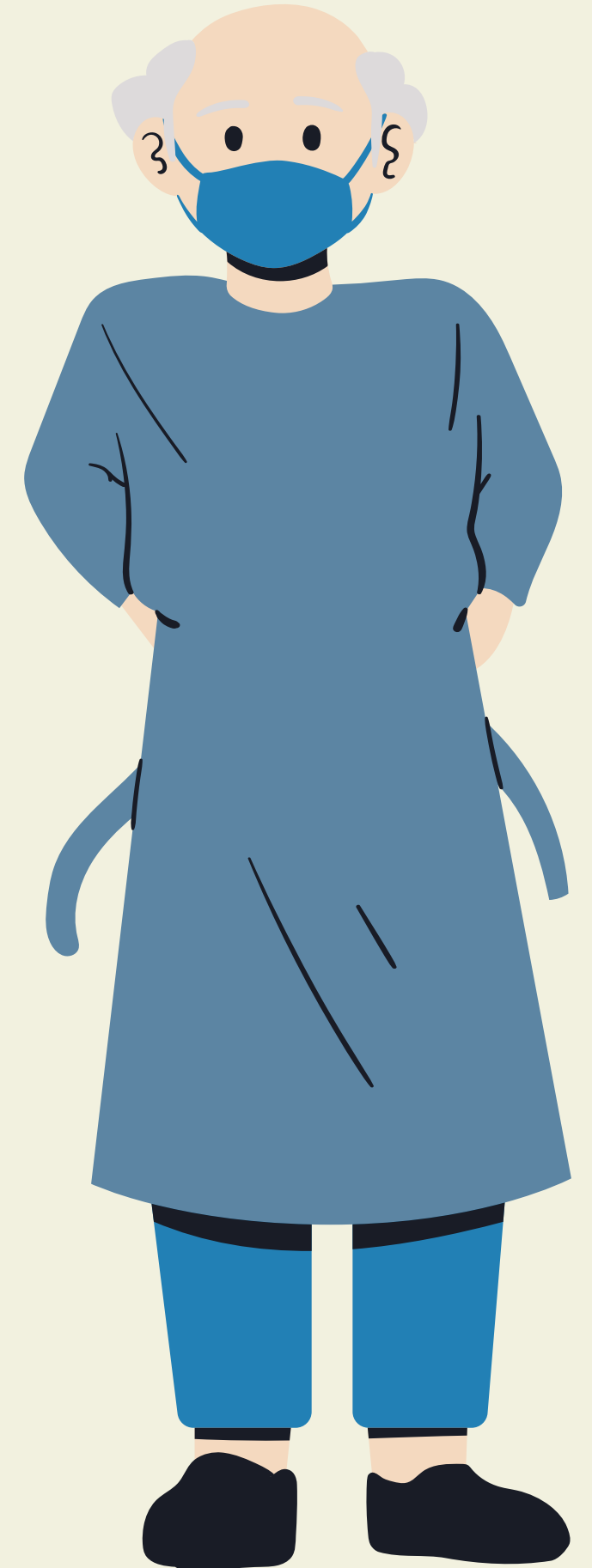
02 Inflammation and ageing

Inflammation and Ageing

As we age, the balance of inflammatory responses in the body can shift towards a chronic state, and could lead to the development of numerous age-related diseases.

Inflammaging

low-grade, persistent inflammation



Inflammation and Ageing



Cardiovascular Diseases

(such as atherosclerosis)



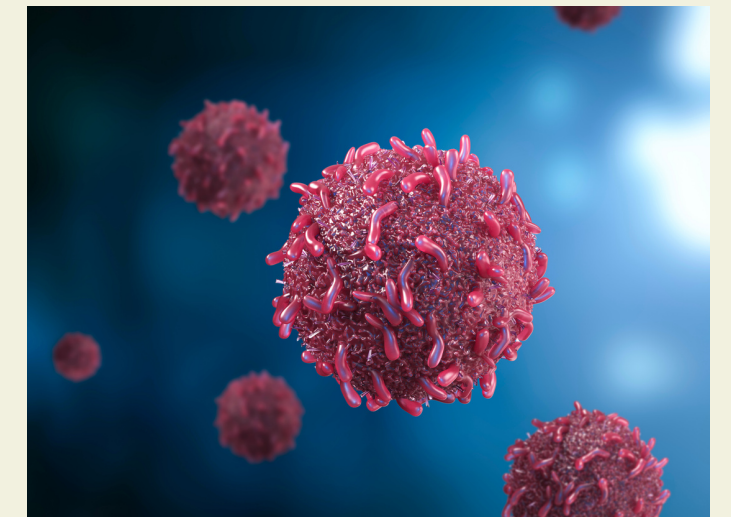
Neurodegenerative Diseases

(such as Alzheimer's or Parkinson's)



Metabolic Diseases

(such as Diabetes)



Cancer

Immunosenescence

- The immune system undergoes changes as we age
- Age-related decline in immune function that can contribute to the development of chronic inflammation.

Inflammatory markers

C-Reactive Protein (CRP), interleukin-6 (IL-6)

- commonly used markers to assess inflammation in the body
- Elevated levels of these markers are indicative of increased inflammatory activity





03 Ageing well

A sedentary lifestyle, poor dietary choices, and chronic stress can all contribute to an inflammatory state.



Recognizing and addressing these factors is crucial for promoting healthy aging.

Diet

Diet plays a significant role in modulating inflammation.

Certain foods, such as those rich in antioxidants, omega-3 fatty acids, and phytochemicals, have anti-inflammatory properties.

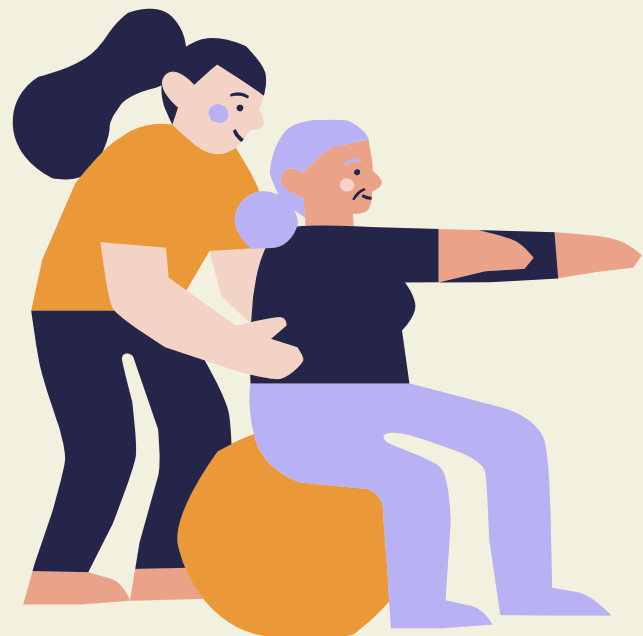


A well-balanced diet that includes fruits, vegetables, whole grains, and lean proteins can help mitigate chronic inflammation.

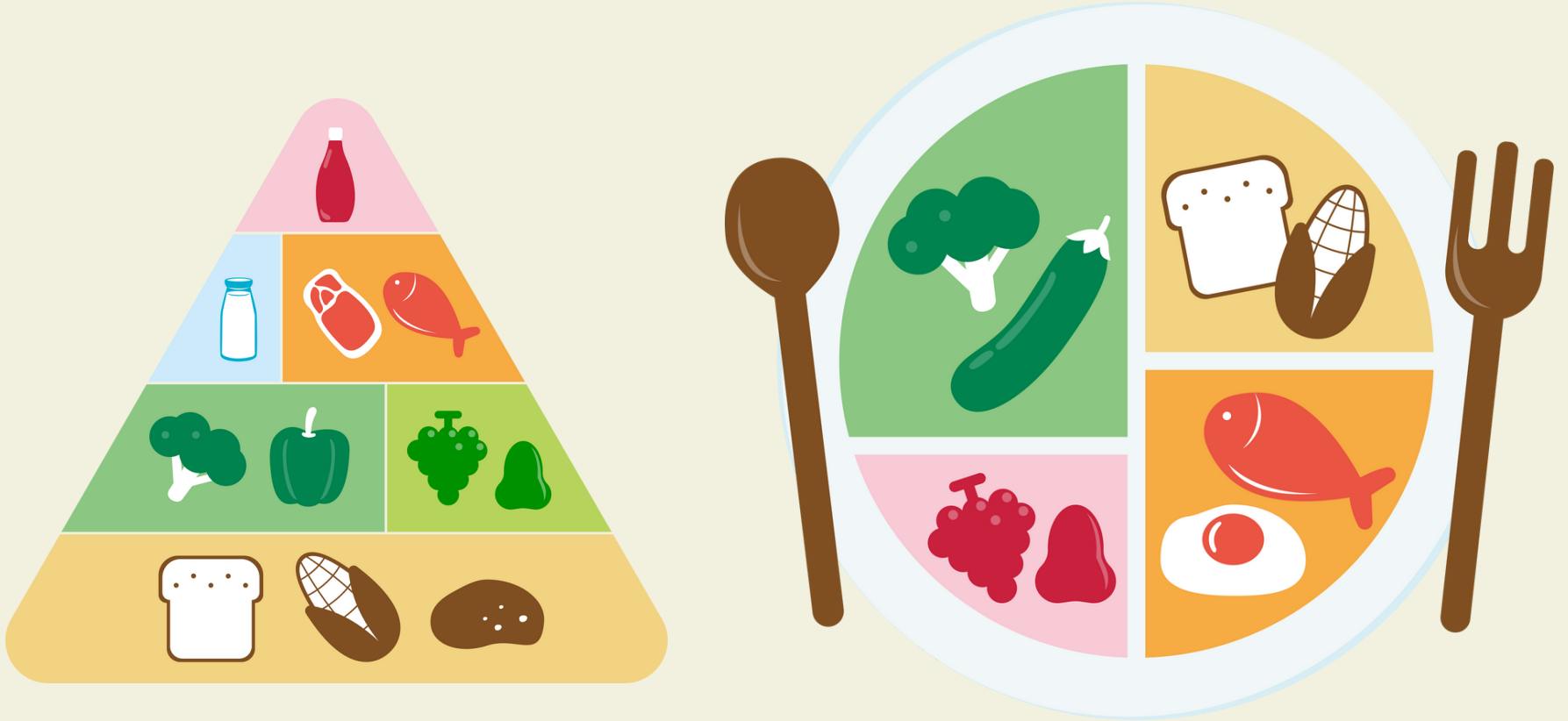
Exercise

Regular physical activity is a powerful anti-inflammatory intervention.

Exercise has been shown to reduce levels of inflammatory markers, improve immune function, and enhance overall well-being. Both aerobic and resistance training exercises contribute to these benefits.



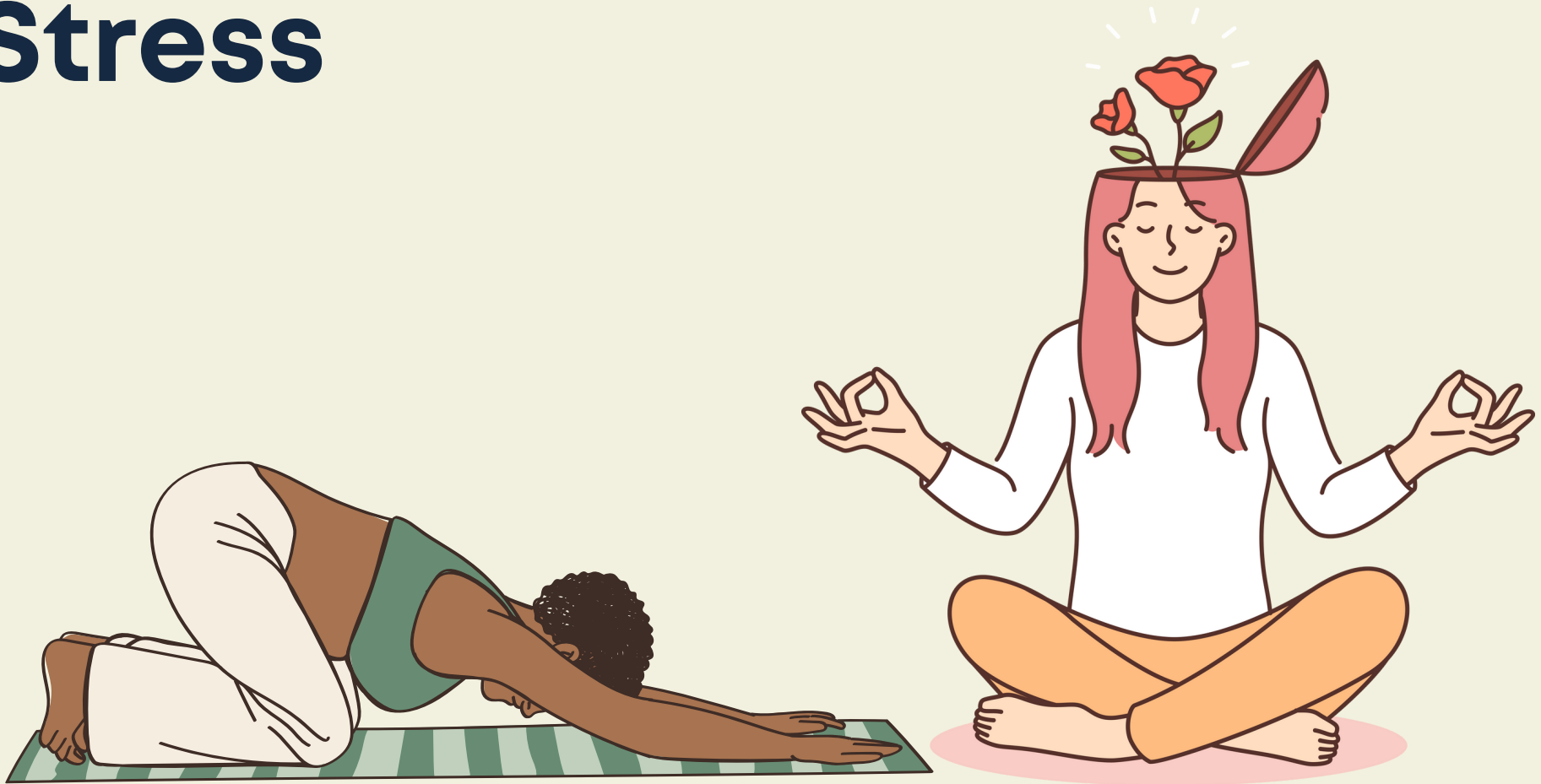
Diet



Exercise



Stress



Treatments



Prevention

is better than cure



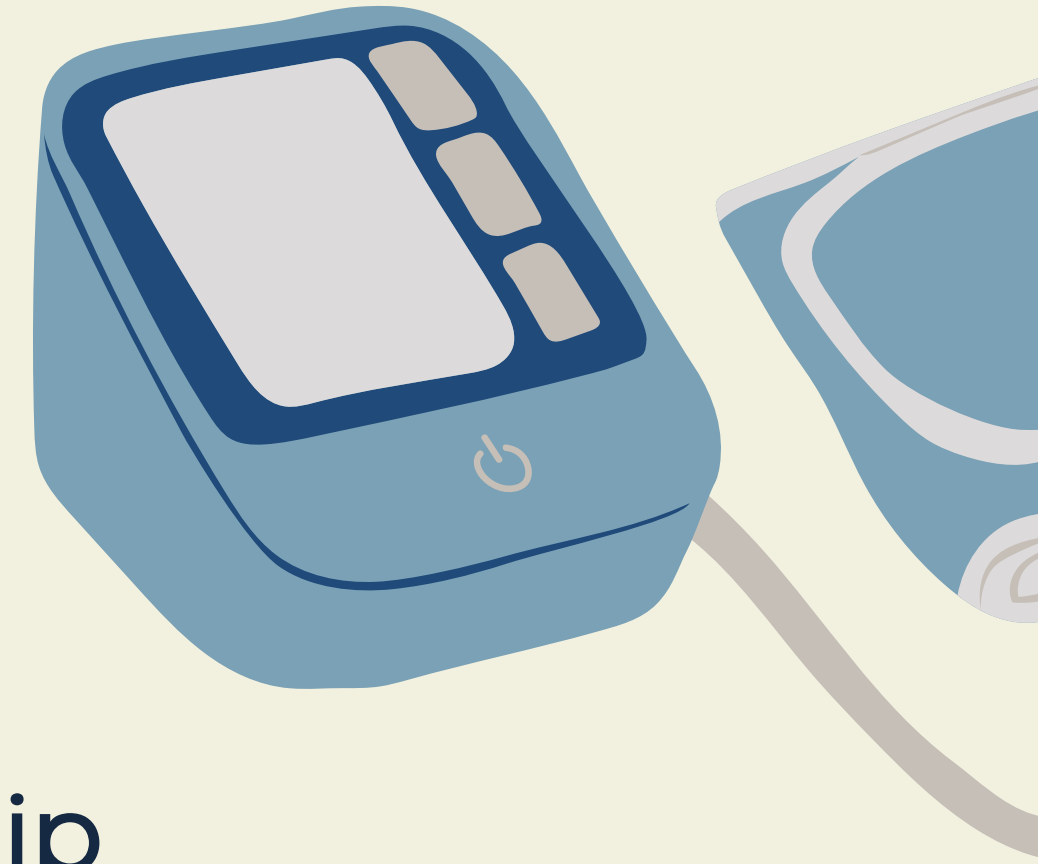
Genetic Screening

Genes (or mutations in DNA) have been found to be involved in many inflammation-related disorders.

By knowing our genes, we know what diseases or conditions we are prone to have, and can take necessary measures to prevent diseases from happening.



Take home messages



01 Understanding the intricate relationship between inflammation and aging is essential for promoting healthy aging.

02 Adopting an anti-inflammatory lifestyle can mitigate the impact of chronic inflammation and reduce the risk of age-related diseases.



**Thank you
for your
attention!**