

VIBE ACTIVITIES

Healthy Vibe – Auto-immune disorders page 26

HEALTHY VIBE

HEALTHY BODY

AUTO-IMMUNE DISORDERS OCCUR WHEN A PERSON'S USUALLY HELPFUL IMMUNE SYSTEM MISTAKENLY ATTACKS HIS OR HER BODY. THERE ARE AROUND 80 AUTO-IMMUNE DISORDERS, RANGING FROM MILD TO DISABLING, DEPENDING ON WHICH PART OF THE BODY IS UNDER ATTACK AND TO WHAT DEGREE. THESE DISORDERS ARE ALSO THOUGHT TO BE THE ROOT CAUSE OF MANY OTHER DISEASES, SUCH AS ALZHEIMER'S DISEASE, DIABETES, CANCER, HEART DISEASE AND STROKES, AS WELL AS A RANGE OF OTHER CONDITIONS.

An auto-immune disorder occurs when a person's immune system mistakenly attacks their own body tissues. In other words, the immune system mistakes some part of the body as an infectious agent (such as a virus or bacteria) and attacks its own cells.

Auto-immune disorders are broadly put into two categories: 'organ-specific', which means just one organ is affected; and 'non organ-specific' disorders, which can affect multiple organs or systems.

These disorders can affect nearly every organ and system of the body. Here are some auto-immune disorders.

* **Diabetes (Type I)** – affects the pancreas. Symptoms include thirst, frequent urination, weight loss and an increased risk of infection.

* **Graves' disease** – affects the thyroid gland. Symptoms include weight loss, elevated heart rate, anxiety and diarrhoea.

* **Inflammatory bowel disease** – affects the bowel and includes ulcerative colitis and, possibly, Crohn's disease. Symptoms include diarrhoea and abdominal pain.

* **Lupus** – affects connective tissue and can strike any organ system of

Auto-immune disorders

When the body attacks itself...

the body. Symptoms include joint inflammation, fever, weight loss and a characteristic facial rash.

* **Multiple sclerosis** – affects the nervous system. Symptoms can include numbness, paralysis and vision impairment, depending on which part of the nervous system is affected.

* **Psoriasis** – affects the skin. Features include the development of thick, reddened, scaly patches of skin.

* **Rheumatoid arthritis** – affects the joints. Symptoms include swollen and deformed joints.

* **Scleroderma** – affects skin and joints. Symptoms include thickening of the skin, skin ulcers and stiff joints.

What happens?

Normally the immune system's white blood cells help protect the body from harmful substances, called antigens. Examples of antigens include bacteria, viruses, toxins, cancer cells, and blood or tissue from another person or species. The immune system produces antibodies that destroy these harmful substances.

In patients with an auto-immune disorder, the immune system can't tell the difference between healthy body tissue and antigens. The result is an immune response that destroys normal body tissue.

Risk factors

According to the Better Health Channel, the exact causes of auto-immune disorders are not known. The risk factors seem to include genetics, environmental factors, gender (women are more susceptible

than men), infection and major hormonal changes – some disorders seem to be affected by major hormonal changes, such as pregnancy, childbirth and menopause.

Diagnosis

It can be difficult to diagnose an auto-immune disorder, especially in the earlier stages and if multiple organs or systems are involved, but a diagnosis may include a physical examination, medical history, blood tests, a biopsy or X-rays.

Treatment

Auto-immune disorders in general can not be cured, but the symptoms can be lessened. Traditional treatments include anti-inflammatory drugs, Corticosteroids (again to reduce inflammation), pain-killing medications, and Immunosuppressant drugs (to inhibit the activity of the immune system), as well as physical therapy to encourage mobility.

Alternative treatments include changing to a more alkaline-based diet. Western diets are high in acid-forming foods, resulting in poor health results for most people.

Good alkaline foods include green leafy vegetables, such as spinach, as well as cucumbers, broccoli, asparagus, cabbage, onions, radishes, peas, leeks, turnips, carrots, chives, green beans, beetroot, celery, avocados and tomatoes. Also in this category are almonds and sunflower seeds, as well as sprouts, grains (such as millet and quinoa), miso soup and green tea.

If you suspect you are suffering from an auto-immune disorder, visit your GP or local AMS and get checked out.

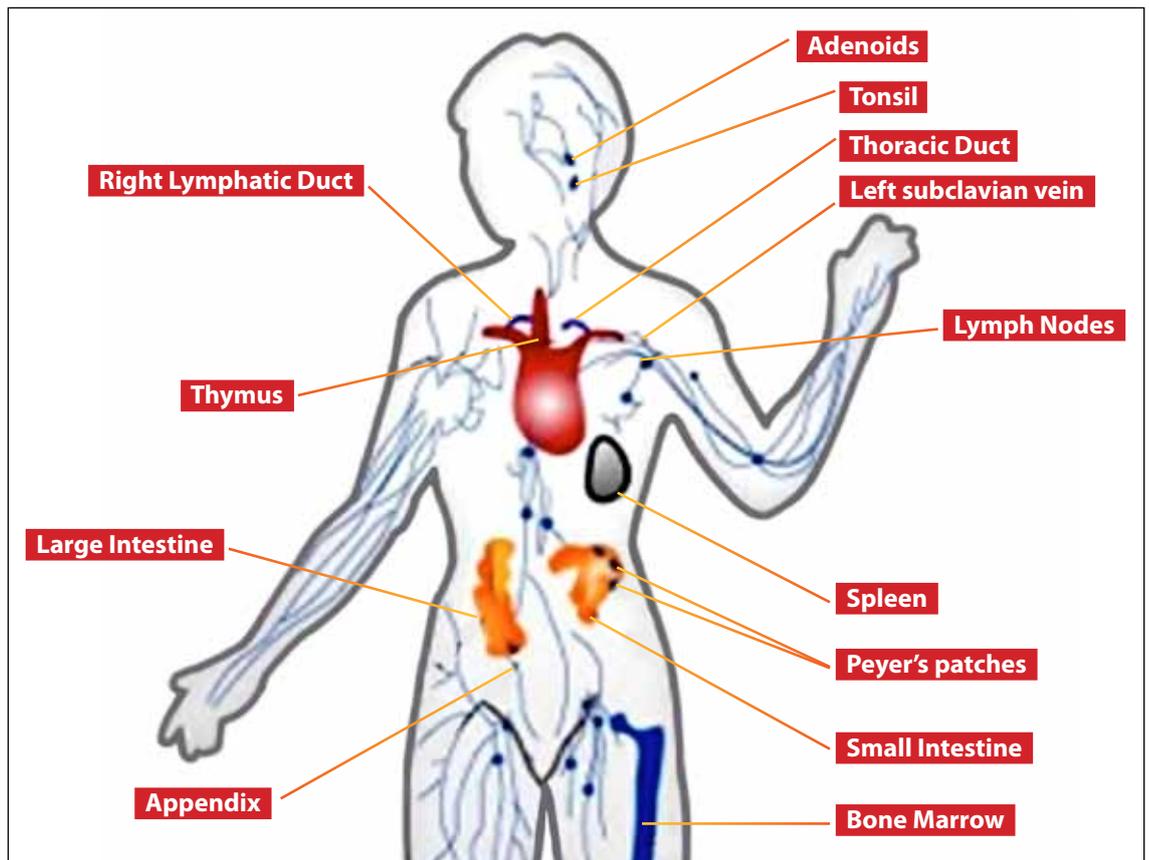
These disorders are also thought to be the root cause of many other diseases.

Auto-immune disorders occur when a person's usually helpful immune system mistakenly attacks their body. In order to have a strong immune system, proper nutrition is essential. Also, good sleep, exercise and healthy habits like washing your hands are all important.

Read *Healthy Vibe, Healthy Body Auto-immune disorders* on page 26 and answer the questions that follow.

ACTIVITY 1

BUILDING READING SKILLS



Immune system

- skimming and scanning for information.
- reading headings, text boxes and pictures.
- reading for meaning.
- making connections between the text and your world.

There are three levels of comprehension questions:

- | | |
|-----------------|---|
| Literal | The answer is located in one sentence in the text. |
| Inferred | You need to make links between sentences and graphics (such as illustrations, maps and tables) and what you already know. |
| Applied | The answer is in your background knowledge, what you already know or feel. |

1 Define auto-immune disorder in your own words.

(literal)



2 Which diseases are thought to be caused by auto-immune disorders?

(inferred)

3 List the two categories of auto-immune disorder.

(literal)

4 List eight auto-immune disorders.

(literal)

5 Choose two of the disorders from Question 4 and fill in the grid below.



Auto-immune disorder	Parts of the body affected	Common symptoms

6 Using a flow chart, explain what happens in a healthy immune system and in a system that has an auto-immune disorder.

(inferred)



7 What are some of the risk factors for auto-immune disorder?

(inferred)



8 What is one alternative treatment for auto-immune disorder?

(inferred)

9 Why would some people seek alternative treatments rather than use chemical treatments?

(applied)



10 You are trying to treat an auto-immune disorder by changing your diet to include more alkaline-based foods.

Make a list of what you would eat for meals to implement this diet.

(applied)



Breakfas	Lunch	Dinner

ACTIVITY 2

LANGUAGE CONVENTIONS - SPELLING

1 The spelling mistakes in these sentences have been underlined. Write the correct spelling for each word in the box.



It is mistaken as an infecshous agent.

A virus or backteria attacks the body.

It can result in increased risk of infection.

2 Each sentence has one word that is incorrect.
Write the correct spelling of the word in the box.



Auto-immune disorders can lead to diarea.

It can cause inflammation of the joints.

There can be harmful substanses in the body.

ACTIVITY 3

LANGUAGE CONVENTIONS - PUNCTUATION

1 Correct the punctuation and spelling errors in this passage.



good alkeline foods can include grean leafy vegetables such as spinach as well as cucumbers broccolli asparagas cabbage onions and tomatoes also in this category are grains such as millet and quinoa



ACTIVITY 4

TAKING CARE OF YOUR IMMUNE SYSTEM



Strategy	Why this is helpful
Eat a well-balanced and healthful diet.	
Get plenty of exercise and rest.	
Brush your teeth and bathe or shower regularly.	
Keep your home clean.	
Avoid tobacco, drugs and alcohol.	
Get vaccinations that prevent diseases.	

ACTIVITY 5

POSTER



1 Create a poster to persuade teenagers to take care of their immune system.

Use your layout and design to make your points clearly eg bold colours, sub-headings, different fonts, eye-catching pictures, a catchy slogan, where to find out more information etc.