

A faint, light gray background image of a DNA double helix structure, showing the characteristic twisted ladder shape with rungs representing base pairs.

HOMEOSTASIS AND BODY DEFENCE



Q. The father of Homeostasis is

1. Claude Bernard

2. Walter. B. Cannon

3. Norbert Weiner

4. Edward Jenner



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- 1. Parturition**
- 2. Activation of proteolytic enzymes**
- 3. Blood clotting mechanism**
- 4. Maintenance of blood sugar**

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Q. The number of di-sulphide bridges formed between alpha and beta chains of insulin are

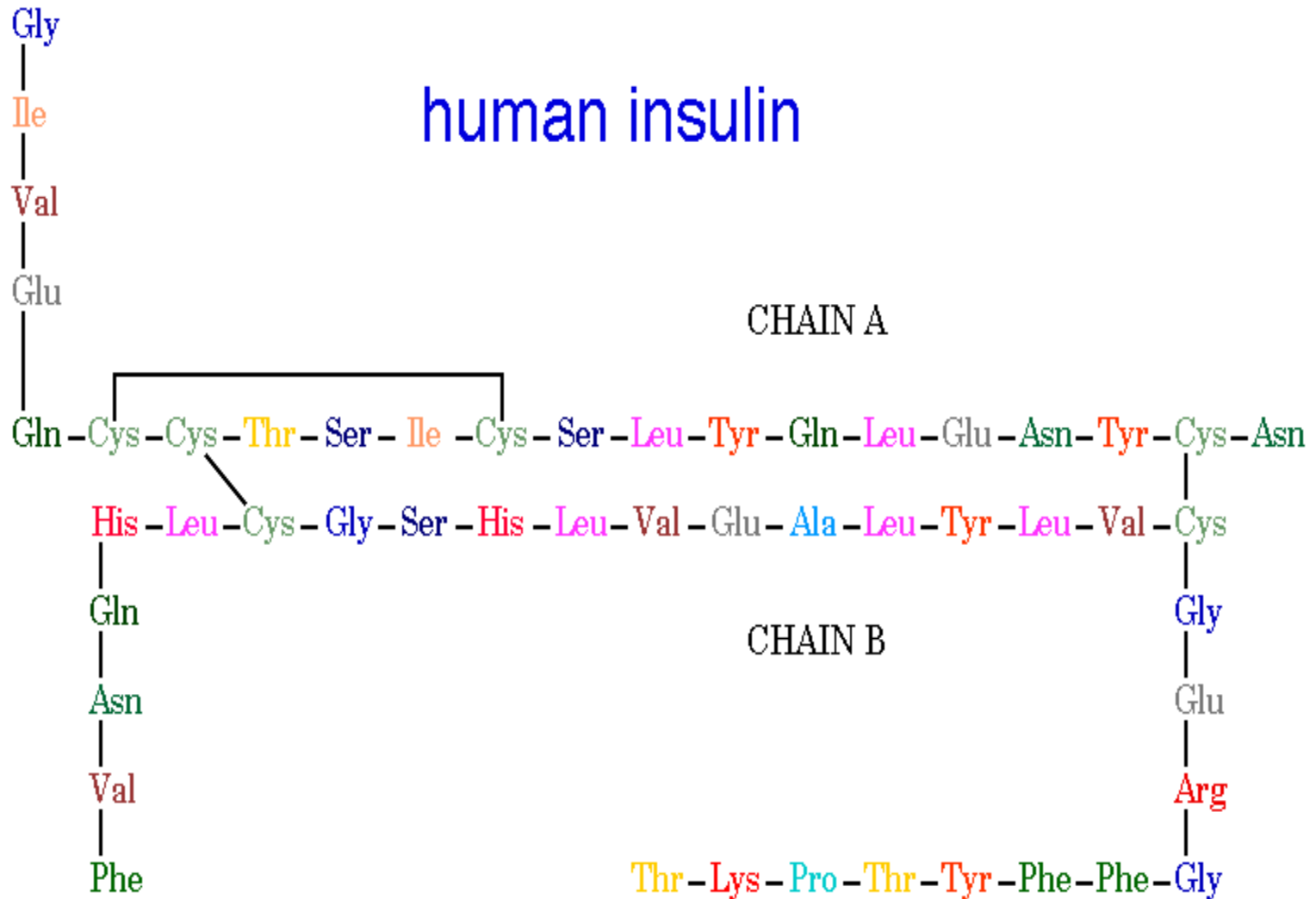
1. One

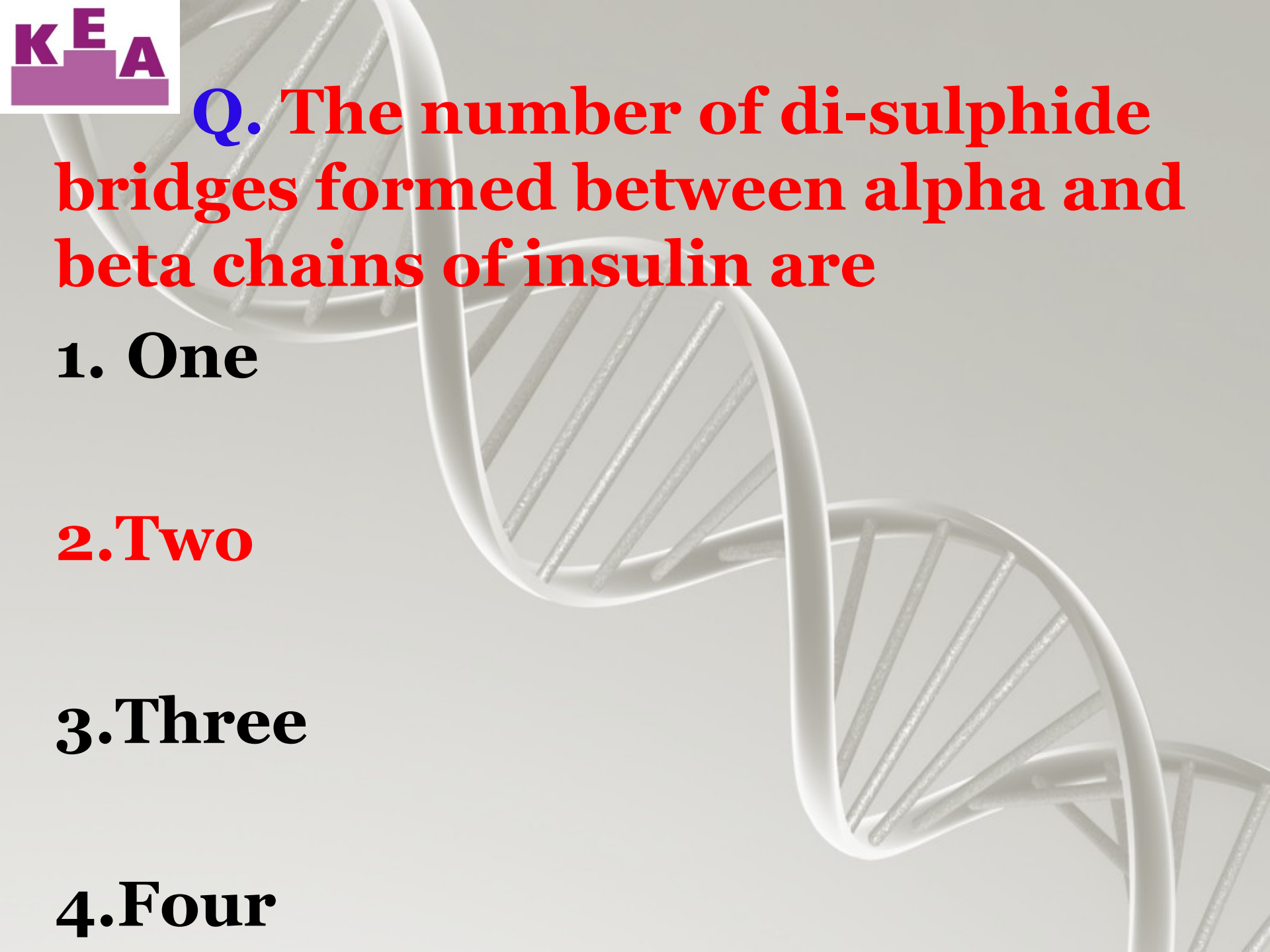
2. Two

3. Three

4. Four

human insulin



A large, light gray, semi-transparent DNA double helix structure is positioned diagonally across the background of the slide, starting from the top left and extending towards the bottom right. The helix is rendered with smooth, rounded surfaces and thin, vertical rungs representing the base pairs.

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Q. A person is considered diabetic if his fasting glucose level is _____ & post-prandial glucose level is _____.

- 1. 80 mg/ dL; 120 mg/dL**
- 2. 140 mg/ dL; 200 mg/ dL**
- 3. 20 mg/ dL; 30 mg/ dL**
- 4. 200 mg/ dL; 140 mg/ dL**



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Q. The increased blood sugar level is called

1. Glycosuria

2. Hyperglycemia

3. Uraemia

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Q. Insulin does **not help in the following**

- 1. Glycogenesis**
- 2. Gluconeogenesis**
- 3. Lipogenesis**
- 4. Increasing the permeability of cells for glucose.**

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Q. The insulin promotes

1. Glucogenesis

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3. Glycogenolysis

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Q. Which of the following is **not a symptom of diabetes mellitus?**

1. Hyperglycemia

2. Polydipsia

3. Ketonemia

4. Antidiuresis

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Q. Diabetes mellitus patients may not show

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2. Lipogenesis

3. Ketosis

4. Diuresis

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Q. The glucagon is secreted when a person is

- 1. Diabetic**
- 2. Hyperglycemic**
- 3. Hypoglycemic**
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Q. IDDM is also called

- 1. Type II diabetes mellitus**
- 2. Ketosis resistant diabetes mellitus**
- 3. Ketosis prone diabetes mellitus**
- 4. Insulin tolerant diabetes mellitus**

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4. Di-methyl asteriquinone

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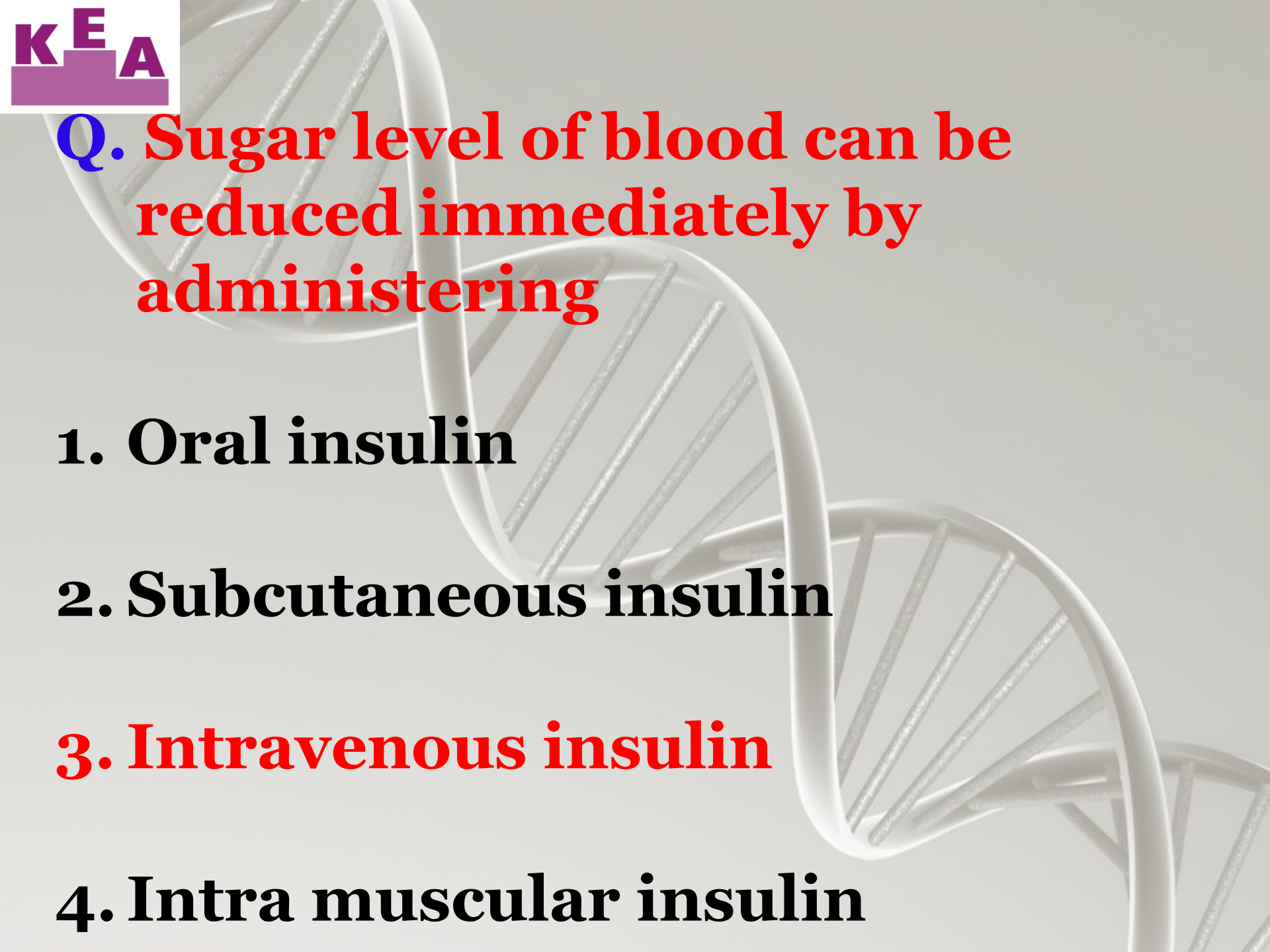
2. Alloxan

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**4. Di-methyl asteriquinone
(pseudo massaria fungus)**

Q. Sugar level of blood can be reduced immediately by administering

- 1. Oral insulin**
- 2. Subcutaneous insulin**
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Q. The excess intake of insulin causes drastic hypoglycemia that may lead to death is called

- 1. Insulin tolerance**
- 2. Insulin shock**
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Q. The innate immunity is provided by

- 1. T- lymphocytes**
- 2. B - Lymphocytes**
- 3. T Helper cells**
- 4. Neutrophils**

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Q. The third line of body defense includes

- 1. Skin & mucous membrane**
- 2. Phagocytes & NK cells**
- 3. Histamines & Prostaglandins**
- 4. T & B lymphocytes**

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are present in**

- 1. Sebum**
- 2. Sweat**
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Q. Which of the following are not fixed phagocytes?

- 1. Kupffer cells & Dust cells**
- 2. Langerhan cells & Microglial cells**
- 3. NK cells & T-killer cells**
- 4. Neutrophils & monocytes**

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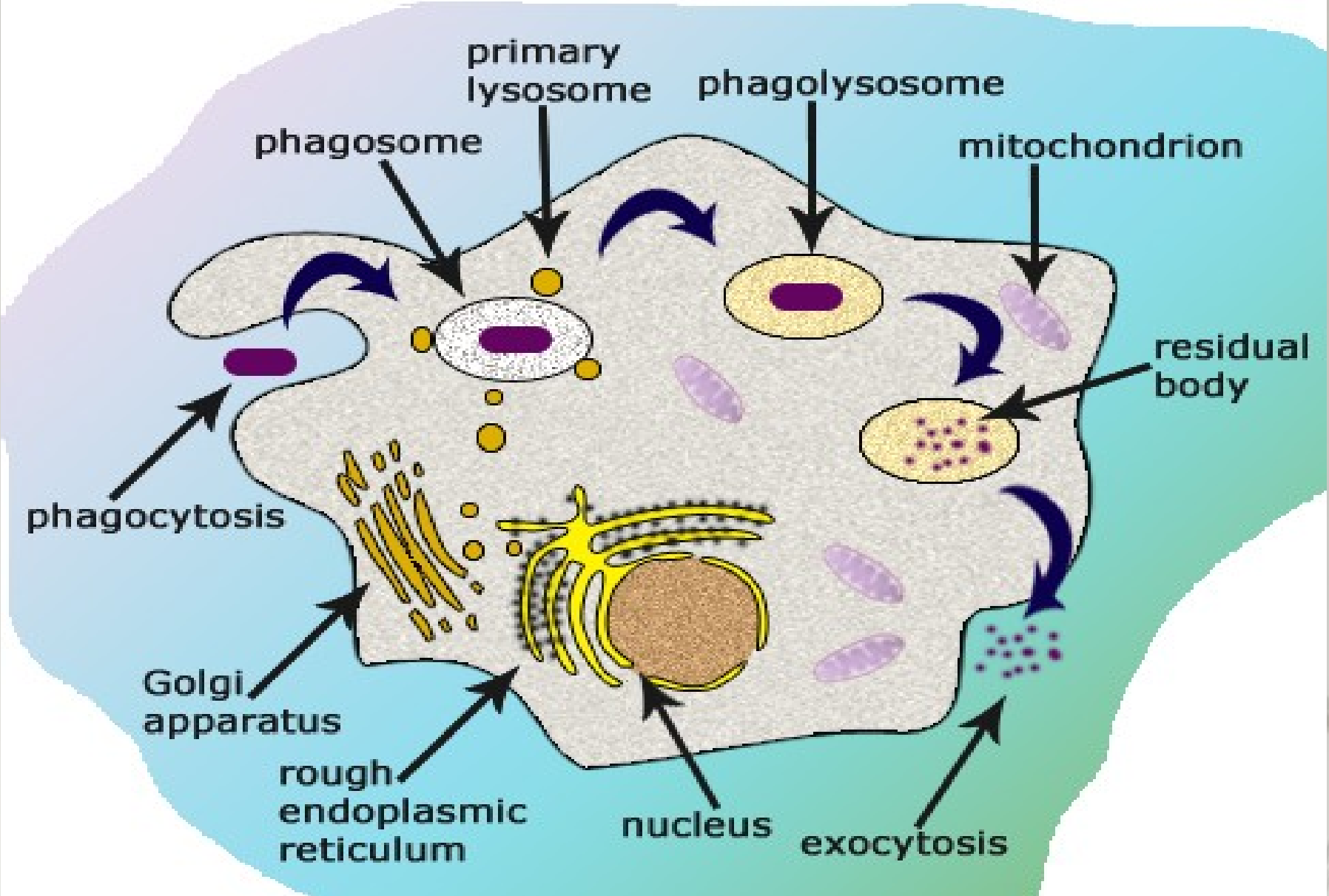
3. NK cells & T-killer cells

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Q. Phagolysosome is a

- 1. Primary lysosome**
- 2. Secondary lysosome**
- 3. Autophagic lysosome**
- 4. Residual lysosome**

PHAGOCYTOSIS



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Q. Which of the following is **not true for NK cells?**

- 1. They are derived from lymphoblasts**
- 2. They are responsible for specific BD.**
- 3. They destroy viral infected & cancerous cells**
- 4. The release granzymes which help in cell apoptosis.**

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- 2. Monocytes**
- 3. NK cells**
- 4. Lymphocytes**

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Q. Perforins & cytolysins are produced by

- 1. NK cells & phagocytes**
- 2. T-helper & T-killer cells**
- 3. NK cells & T-killer cells**
- 4. B-effector & B-memory cells**



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- 3. Antibodies**
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2. Malaria

3. Typhoid

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- 1. Rubber**
- 2. Calor**
- 3. Tumour**
- 4. Dolor**

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- 2. T-killer cells**
- 3. T-suppressor cells**
- 4. Plasma cells**

Q. The CD4 (Cluster designation 4) cells are

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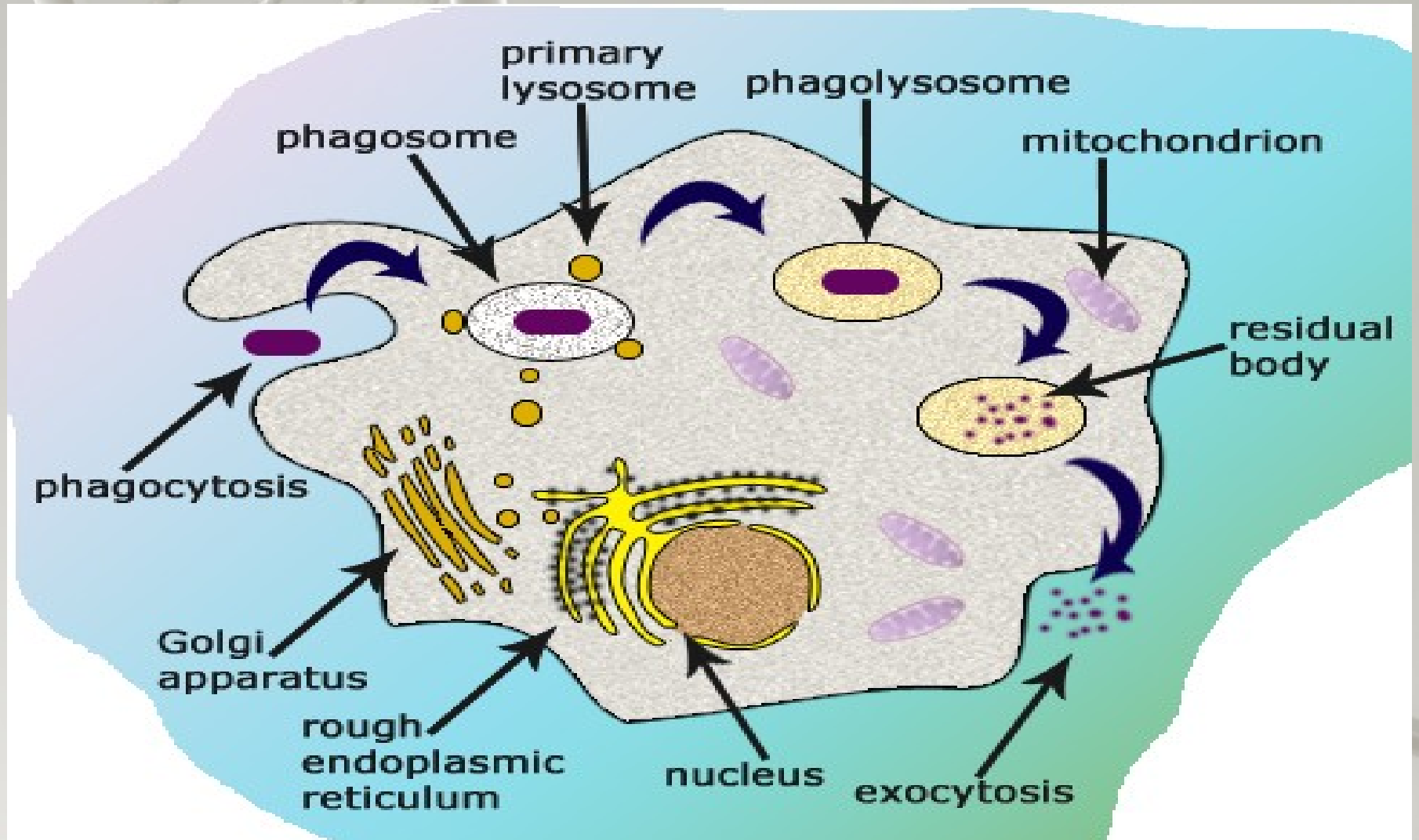
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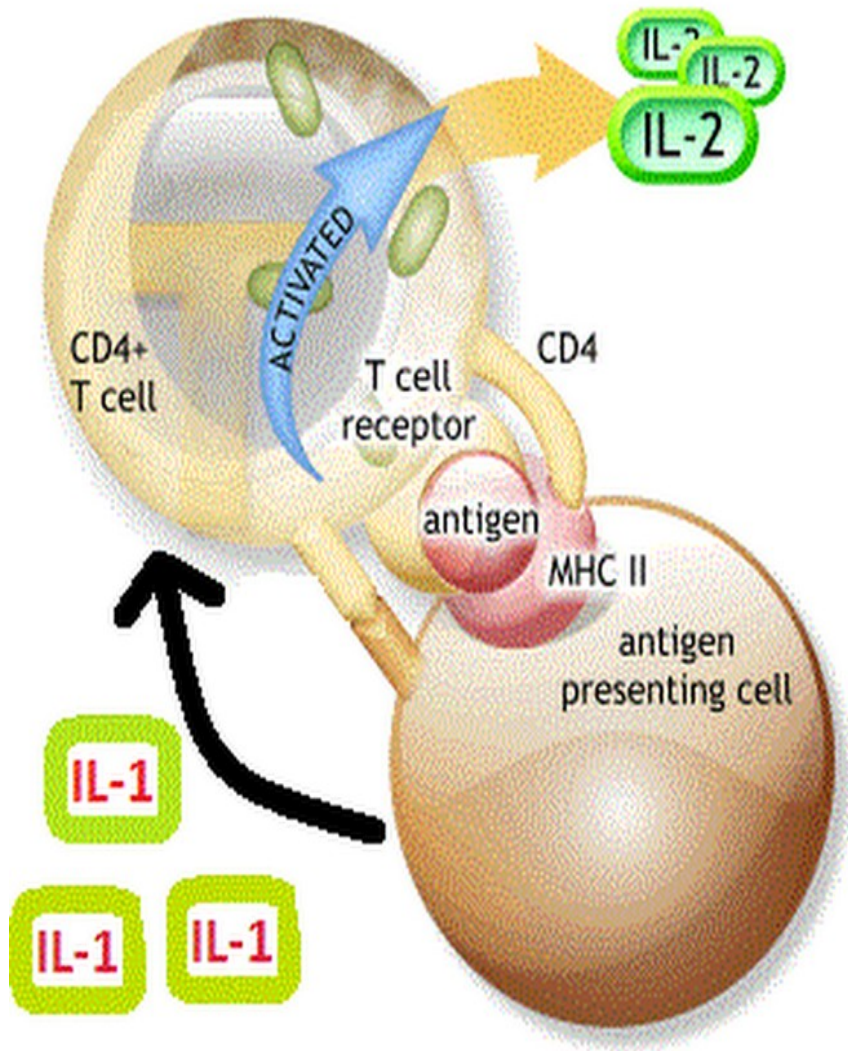
4. Plasma cells [CD27]

Q. The cell mediated immunity is induced by T-Helper cells when they get attached to

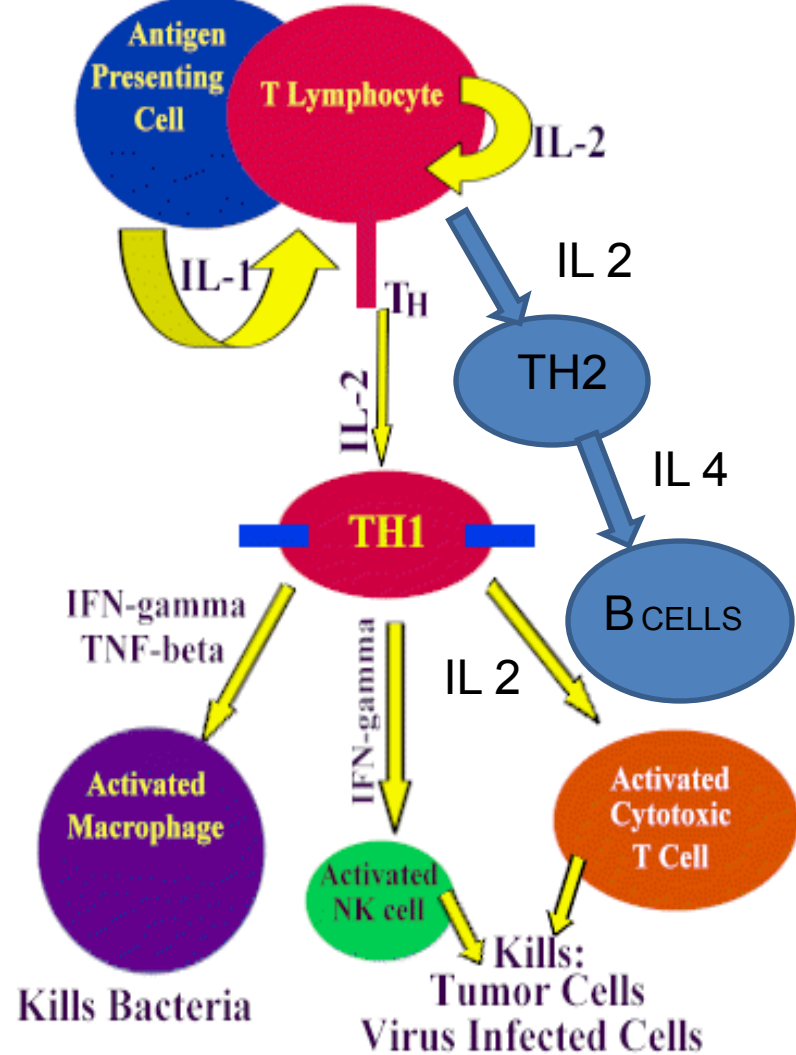
- 1. APC with antigen-MHC II complex**
- 2. APC with antigen-MHC I complex**
- 3. APC with only antigens**
- 4. APC without antigens**

PHAGOCYTOSIS





Cell-Mediated Immunity



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Q. The APC activates T-Helper cells by releasing the lymphokine

1. Interleukin 1

2. Interleukin 2

3. Interleukin 4

4. γ -Interferons

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Q. Match the cells listed in column 1 with their secretions listed in column 2.

COLUMN 1

- a) NK cells**
- b) Mast cells**
- c) APC**
- d) T-helper cells**

COLUMN 2

- (i) Histamins**
- (ii) Perforins & Granzymes**
- (iii) Lymphokinin2 & γ interferons**
- (iv) Lymphokinin1 & MHC2.**

1. a-ii, b-i, c-iii, d-iv

3. a-i, b-ii, c-iii, d-iv

2. a-ii, b-i, c-iv, d-iii

4. a- i, b-iii, c-iv, d-ii

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Q. Primary Lymphoid organs are

1. Organs where lymphocytes mature

2. Organs where mature lymphocytes reside

3. Lymphoid organs of the foetus

4. lymphoid structures formed directly over lymph vessels

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**1. Thymus, Bursafabricious and
Bursa equivalent**

2. MALT, GALT, Spleen, Lymph nodes

3. Thymus, MALT, Peyer's patches

**4. Bursafabricious and Peyer's
patches**

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Q. Damage to thymus in a child may lead to

- 1.Reduction of haemoglobin in blood**
- 2.Reduction in stem cell production**
- 3.Loss of cell mediated immunity**
- 4.Loss of antibody mediated immunity**

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1. CD markers

2. MHC proteins

3. Ig D

4. Ig E

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- 1. They secrete lymphokines to induce the response of B lymphocytes**
- 2. They secrete perforins to kill the antigens**
- 3. They inhibit the immune response of T and B lymphocytes**
- 4. They provide immediate secondary response, if reinfection occur**

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Q. B lymphocytes produce antibodies in response to the instruction received from

1. T_H cells

2. T_K cells

3. T_S cells

4. T_M cells

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Q. The antigen determinant is

1. Epitope

2. Paratope

3. Hapten

4. Immunoglobulin

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Q. Most abundant antibodies are

- 1. IgG**
- 2. IgA**
- 3. IgM**
- 4. IgE**

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Q. The antibodies present on B-Lymphocytes are

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2. IgA

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- 1. Histamine & IgG**
- 2. Histamine & IgE**
- 3. Histamines & IgA**
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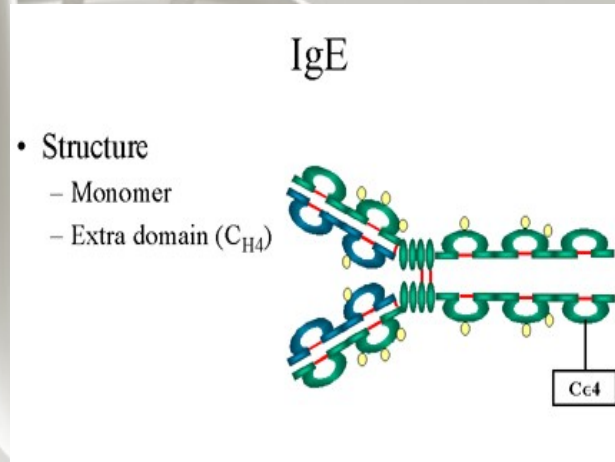
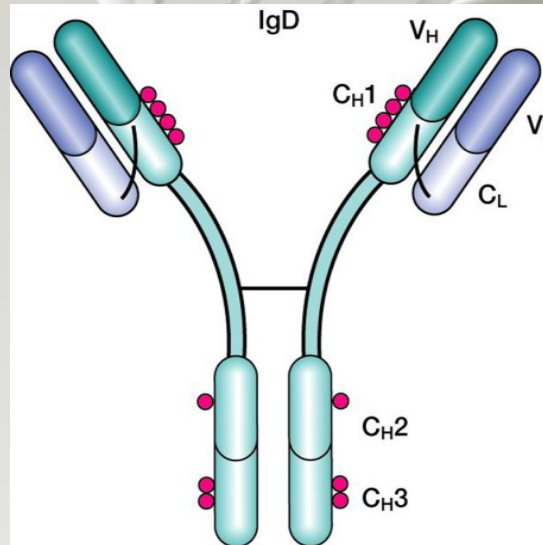
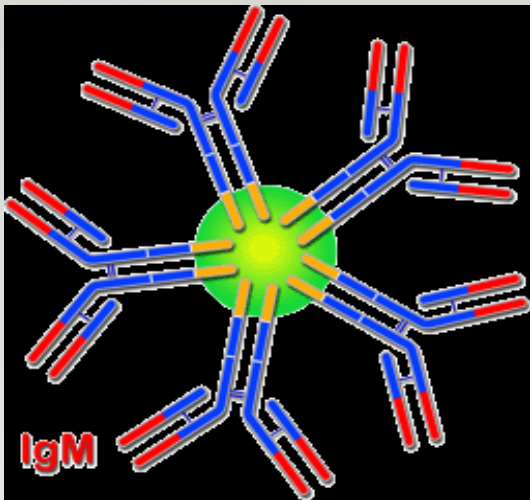
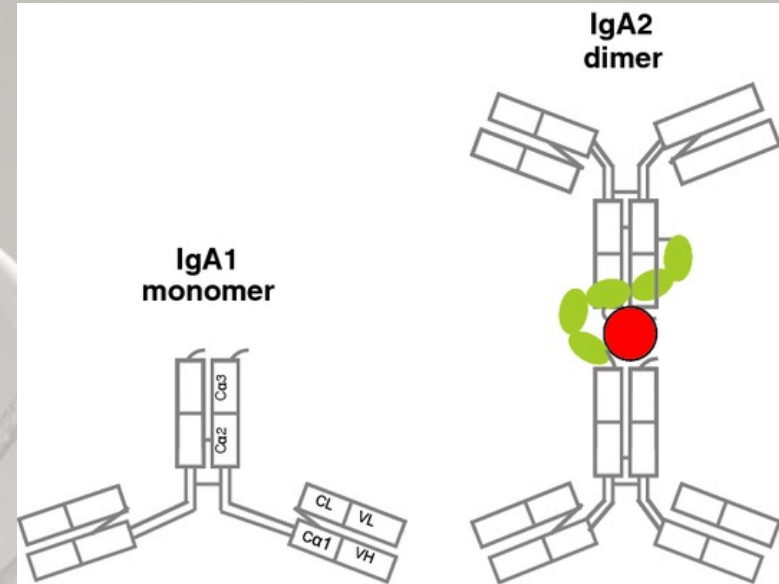
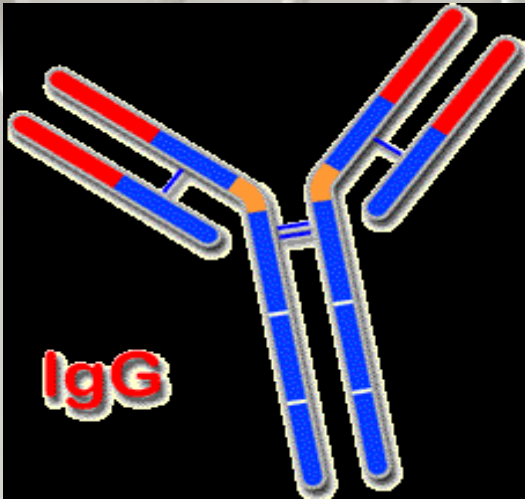
Q. Which of the following statement is wrong with respect to IgM?

- 1. Produced more in number on first infection**
- 2. It activates macrophages & compliment**
- 3. First to reach the site of infection**
- 4. It is a monomer**

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ANTIBODIES



TYPES OF IMMUNITY

ACTIVE IMMUNITY

NATURAL
(INFECTION)

ARTIFICIAL
(VACCINATION)

LIVE VACCINE

- SABIN(POLIO)
- SMALL POX
- BCG

KILLED VACCINE

(TYPHOID, TABORAL, SALK, PERTUSIS)

TOXOIDS (DPT)

PASSIVE IMMUNITY

NATURAL
(MOTHER TO
CHILD)

- IgG(PLACENTA)

- IgA (MILK)

ARTIFICIAL
(IMMUNISED
ORGANISM)

- RABIES

- TETANUS

- BOTULISM

- SNAKE BITE

- AUTO

IMMUNE

DISORDER

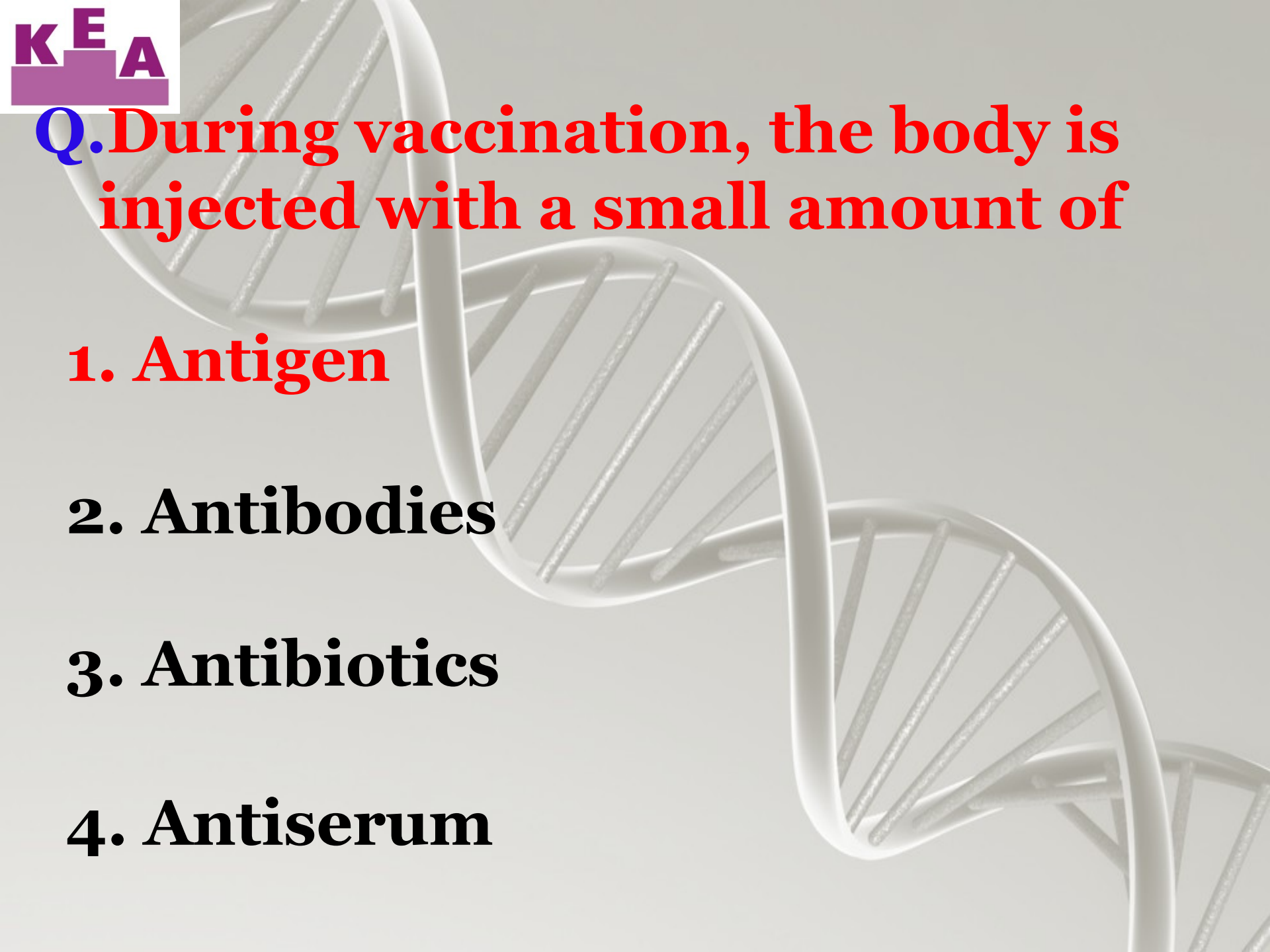
Q. During vaccination, the body is injected with a small amount of

1. Antigen

2. Antibodies

3. Antibiotics

4. Antiserum

A large, semi-transparent white DNA double helix structure is shown, winding diagonally across the page from the top-left towards the bottom-right. The background is a light gray gradient.

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Q. The Live vaccine for poliomyelitis is

- 1. Sabin**
- 2. Salk**
- 3. Taboral**
- 4. BCG**

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- 2. Antigens**
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- 2. Antigens**
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Q. A person is injected with globulin against hepatitis. This is

- 1. Naturally acquired active immunity**
- 2. Naturally acquired passive immunity**
- 3. Artificially acquired active immunity**
- 4. Artificially acquired passive immunity**

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- 1. Serum sickness**
- 2. Auto immune disease**
- 3. Immune tolerance**
- 4. Non specific immunity**

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Q. Which of the following disease is wrongly matched?

- 1. Multiple sclerosis – T-cells attack CNS**
- 2. Rheumatoid arthritis- T-cells attack joints**
- 3. System lupus erthematosus – T-cells attack skin & kidney**
- 4. Bruton’s agamma globulinemia – No T-cell immunity**

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Q. Which of the following is not a feature of specific immunity

1. It exhibits specificity & diversity

2. It forms III line of body defense

3. It exhibits memory

4. It cannot distinguish self & non-self

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