



МОЗГ

...AA yields in many possible conformations that
...clude A-DNA, B-DNA, and Z-DNA. Forms observed in
...B-DNA and Z-DNA have been directly observed in
...structural determinations [10]. The conformation that DNA
...right-handedness on the hydration level, DNA secondary
...structure and direction of separating chemical
...groups, on the base, the type and distribution
...of metal ions, as well as the presence of polyanions
...[10].

...the first published reports of A-DNA X-ray diffraction
...patterns and B-DNA used analyses based on
...electron tomograms that provided only a limited
...amount of structural information for oriented fibers of
...NA [10] [11]. An alternative approach was proposed
...by Watson et al. in 1953 for the structure of
...DNA using scattering patterns of highly hydrated DNA
...fibers in terms of squares of Bessel functions [12]. In the
...paper, Watson and Crick presented their
...molecular modeling analysis of the DNA X-ray
...diffraction patterns to suggest that the structure was a
...double helix [7].

...Although the B-DNA form is most common under the
...conditions found in cells, it is not a well defined
...conformation but a family of related DNA
...conformations [4] that occur at the high hydration
...level present in living cells. Their corresponding X-ray
...diffraction and scattering patterns are characteristic of
...molecular fiber crystals with a significant degree of
...order [13] [16].

...Compared to B-DNA, the A-DNA form is a wider
...right-handed spiral with a shallow, wide minor groove
...and a narrower, deeper major groove. The A form
...is a compact, rigid, non-physiological conformation in partially
...hydrated hydrated fibers of DNA, while in the cell it may be
...found in a enzyme-DNA complex [17] [18].
...Some forms of DNA, such as the Z-DNA form, are
...genetically modified by methylation and have been
...shown to undergo a conformational change in response to
...new changes in conformation and about the Z-form.



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А

ГОЛОВА



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4 = E

ПЕЧЕНЬ

...conformations that
of 2' OH forms observed
...been directly observed in
The conformation that DNA
...water level, DNA, depends
...interacting chemical
...the base and nucleoside
...presence of polyanions

...of a DNA X-ray diffraction
...used analyses based on
...provided only a limited
...method for oriented fibers of
...groups, but these compared
...to the X-ray
...series of highly hydrated DNA
...of Daniel Kasper, 122, in the
...X-ray presented their
...of the data X-ray
...and that the structure was a

...is most common under the
...left hand is well defined
...hydrated DNA
...due to the high hydration
...3. Their corresponding X-ray
...patterns are characteristic of
...a significant degree of

...DNA form is a wider
...shallow, wide minor groove
...for groups. The A form
...logical conformation in partially
...A, while in the cell it may be
...of DNA and RNA strands,
...completely [17], [36].
...has been
...hydration may undergo a
...transit into the Z form.



НОГИ



ЖЕЛУДОК

multiple conformations that A- and Z-DNA forms observed in nature have been directly observed in vivo. The confirmation that DNA hydration level, DNA ionization level, and the chemical state of surrounding chemical species of the base and backbone is the presence of polyanions.

parts of A-DNA X-ray diffraction DNA used analyses based on that provided only a limited information for oriented fibers of state and the three conformational states for the X-ray diffraction patterns of highly hydrated DNA ions of B-DNA form. In the 1950s, it was proposed that the majority of the DNA X-ray diffraction patterns suggest that the structure was a

form is most common under the conditions of a well defined only hydrated DNA. It occurs at the high hydration states. Their corresponding X-ray diffraction patterns are characteristic of a DNA with a significant degree of

the A-DNA form is a wider with a shallow, wide minor groove and major groove. The A form of DNA, while in the cell it may be a mixture of A-DNA and B-DNA strands. DNA conformational states have been chemically modified by methylation may undergo a large change in conformation and about the Z-form.



Тема : «Строение тела человека»

Deoxyribonucleic acid (DNA) is a nucleic acid that contains the genetic instructions used in the development and functioning of all known living organisms, and some viruses. The information in DNA molecules is the long-term storage of instructions for constructing other components of the cell, such as proteins and RNA molecules. The DNA genes, but other DNA sequences have structural purposes or are involved in regulating the use of this genetic information.

DNA is a double-stranded molecule that consists of two antiparallel strands. Each strand is a polymer of nucleotides. The nucleotides are composed of a phosphate group, a deoxyribose sugar, and a nitrogenous base. The bases are adenine, thymine, guanine, and cytosine. The bases on opposite strands pair with each other: adenine with thymine and guanine with cytosine. This base pairing is what holds the two strands together.

The sequence of the DNA strand is most frequently defined by the phosphate and sugar residues. The phosphate groups are attached to the 5' carbon of the deoxyribose sugar, and the hydroxyl groups are attached to the 3' carbon. The phosphate groups are linked to each other by phosphodiester bonds.

Although the B-DNA form is most common under the conditions found in cells, it is not a well defined conformation but a family of related DNA conformations that occur at the high hydration levels present in living cells. Their corresponding X-ray diffraction and scattering patterns are characteristic of disordered structures.

Compared to B-DNA, the A-DNA form is a wider and a shorter, more compact, and more rigid structure. It is a right-handed helix with a deep, narrow major groove and a shallow, wide minor groove. The A-DNA form is a compact, rigid structure that is characteristic of dehydrated DNA, while in the cell it may be present in a more relaxed state. The A-DNA form is also characteristic of DNA in the presence of certain cations, such as lithium and sodium ions.

Внешнее строение

Верхние конечности

(руки)

Голова

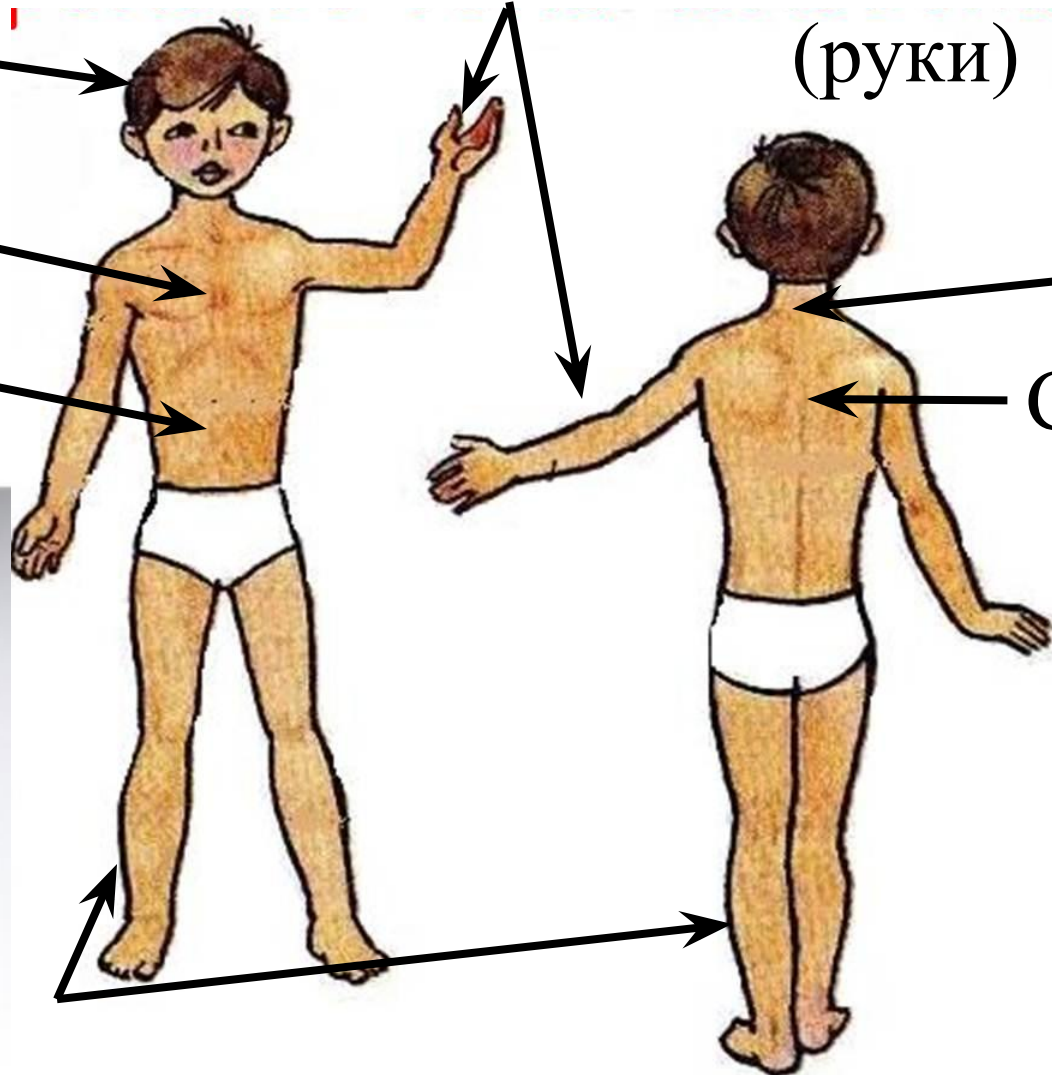
Грудь

Живот

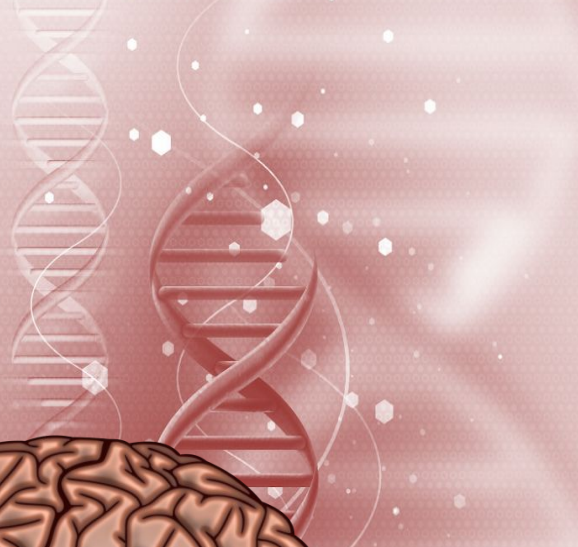
Шея

Спина

Нижние
конечности
(ноги)



МОЗГ



DNA exists in many possible conformations that include A-DNA, B-DNA, and Z-DNA forms observed in cells. A-DNA and Z-DNA have been directly observed by electron microscopy [10]. The conformation that DNA occupies depends on the hydration level, chemical environment, salt concentration, and the direction of sequencing. Chemical modifications of the bases, the type and concentration of metal ions, and as the presence of polyanionic surfactants [21].

The first published reports of A-DNA X-ray diffraction patterns were by B. Strandberg [11]. He reported a Patterson transform that provided only a limited amount of structural information for oriented fibers of DNA [10]. [31]. An alternative approach to the determination of DNA structure was the use of fiber diffraction scattering patterns of highly ordered DNA fibers in terms of repeats of Bernal functions [22]. In the 1950s, James Watson and Francis Crick presented their molecular modeling analysis of the DNA X-ray diffraction patterns to suggest that the structure was a double helix [7].

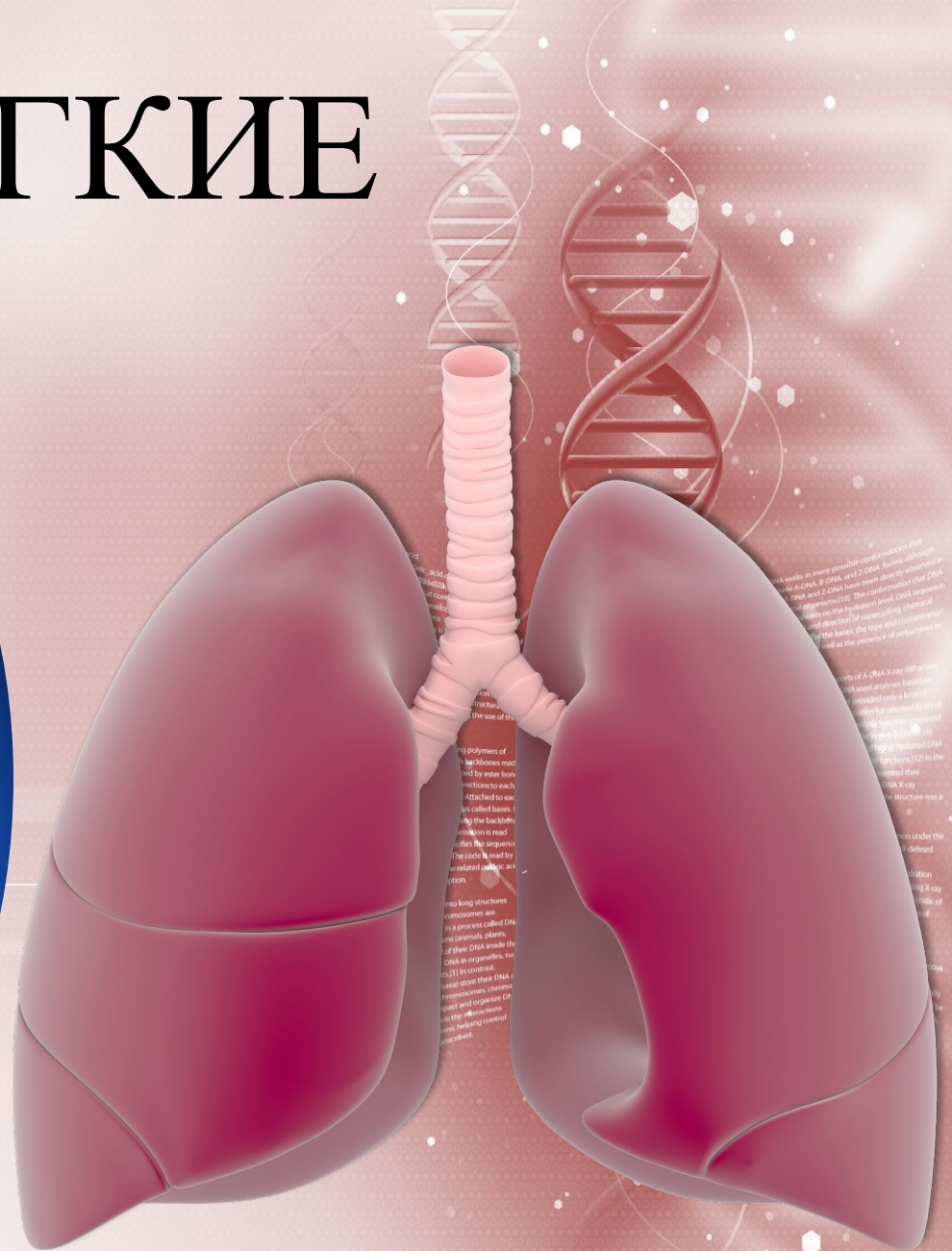
Although the B-DNA form is most common under the conditions found in cells, it is not a well defined conformation but a family of related DNA conformations [4] that occur at the high hydration level present in living cells. Their corresponding X-ray diffraction and scattering patterns are characteristic of disordered polycrystals with a significant degree of disorder [35] [36].

Compared to B-DNA, the A-DNA form is a wider and a shorter, more compact structure. The A form is a narrow, deep major groove. The A form is a compact structure of DNA, while in the cell it may be highly hydrated and its structure is partially determined by the presence of DNA associated proteins, such as histones. DNA associated proteins have been shown to modify the DNA bases [37] [38]. This modification may undergo a conformational change in the DNA structure [39].

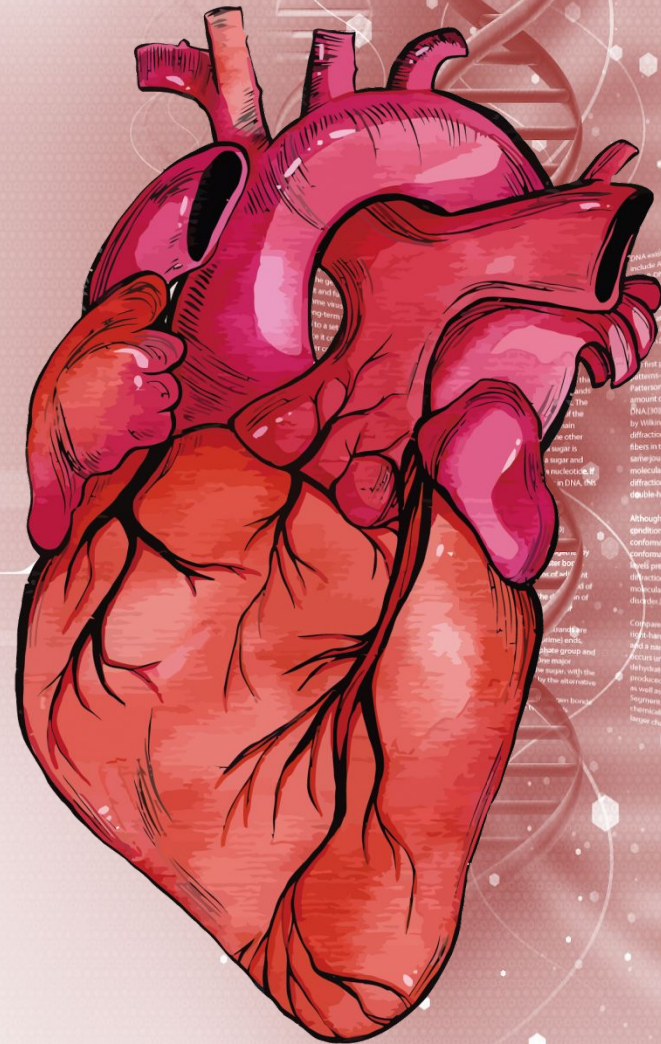
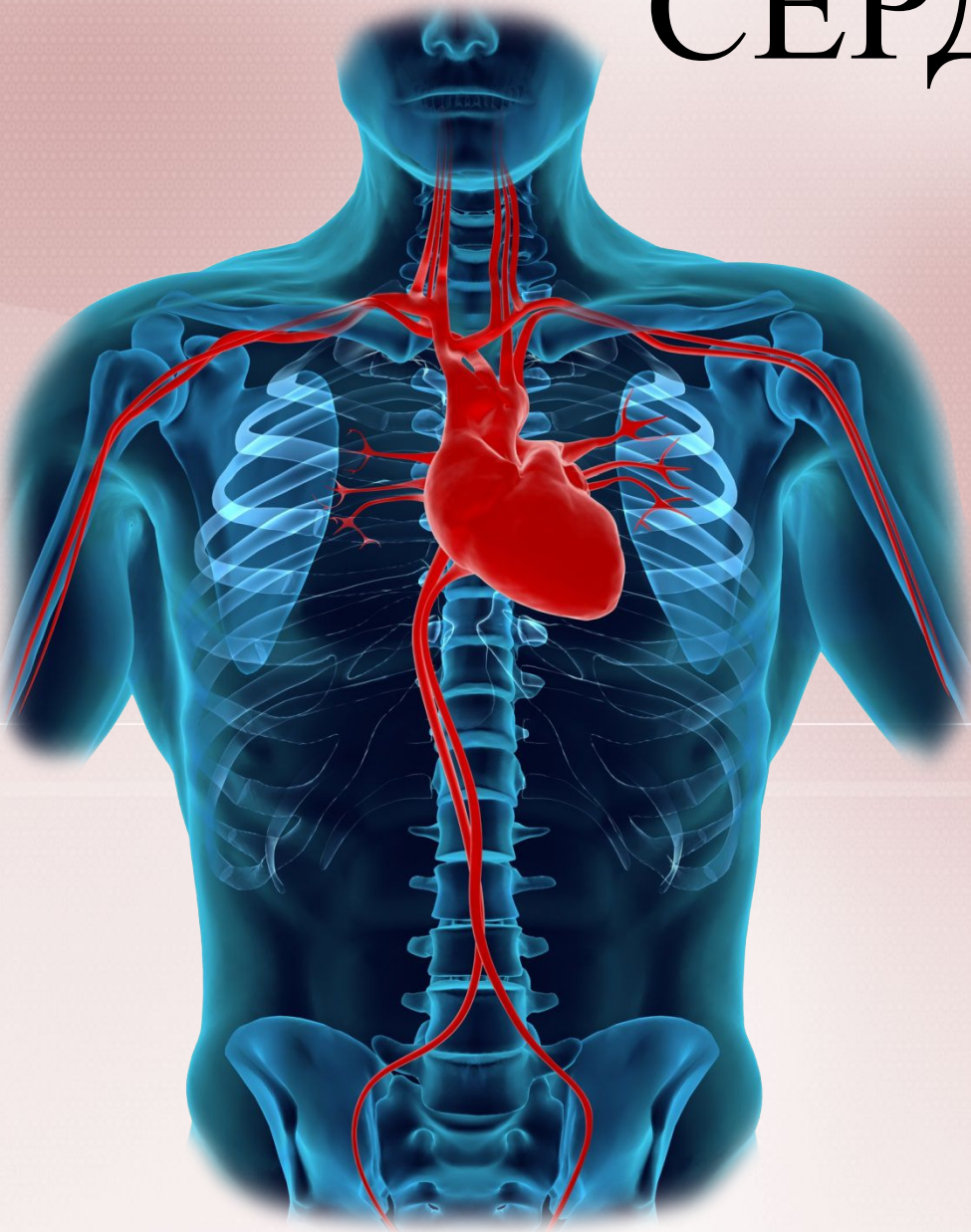
random]plasmid

Within cells, DNA is organized into long structures called chromosomes. These chromosomes are duplicated before cells divide, in a process called mitosis. Eukaryotic organisms normally plants, fungi, and protists store most of their DNA inside the cell nucleus and some of their DNA, only prokaryotes bacteria and archaea store their DNA only in the cytoplasm. Within the chromosomes, chromatin proteins such as histones compact and organize DNA. These compact structures guide the interactions between DNA and other proteins, helping control which parts of the DNA are transcribed.

ЛЕГКИЕ



СЕРДЦЕ



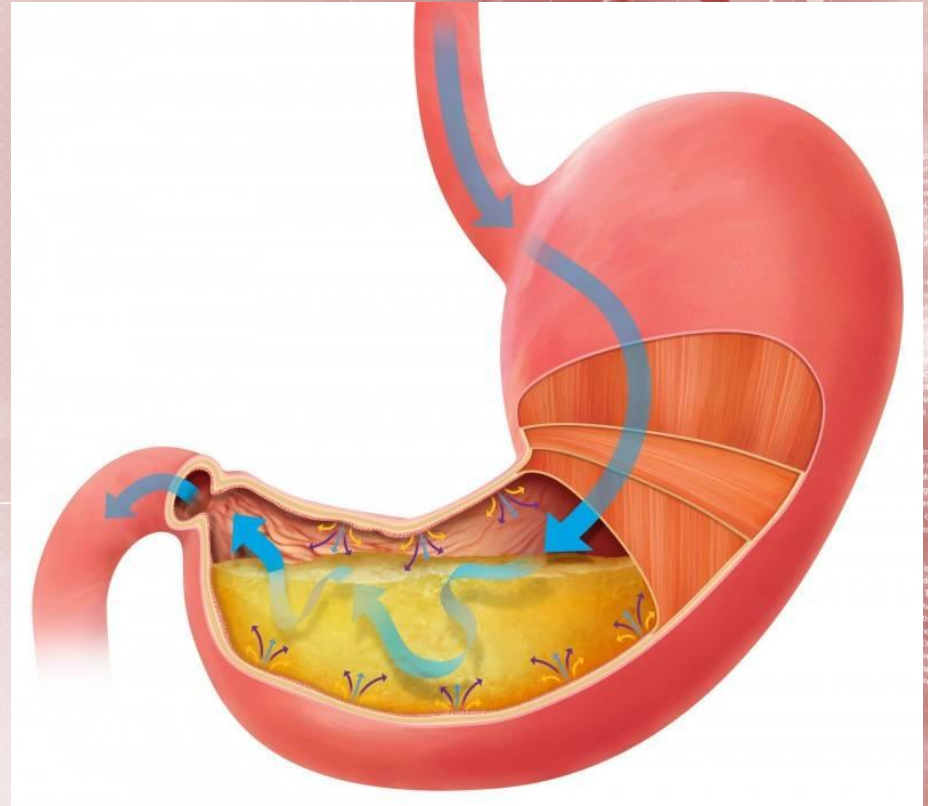
DNA exists in many possible conformations that include A-DNA, B-DNA, and Z-DNA. Forms observed in nature include B-DNA, but it has been observed that DNA can adopt other conformations. The conformation of DNA depends on the hydration level, chemical environment, and the base pair sequence and is maintained by the base pair sequence and the presence of polyanions.

Three published reports of A-DNA X-ray diffraction patterns and B-DNA used analyses based on Patterson transforms that provided only a limited amount of structural information for condensed DNA. An alternative approach for the determination of the conformation of DNA is the use of other methods such as the electron microscopy method. The electron microscopy method is a powerful tool for the study of the structure of DNA. It has been used to study the structure of DNA in terms of segments of B-DNA. Watson and Crick presented their molecular model of DNA in 1953. Their model was based on X-ray diffraction patterns to suggest that the structure was a double helix.

Although the B-DNA form is most common under the conditions found in cells, it is not a well defined conformation but a family of related DNA conformations that occur at the high hydration level present in living cells. Their corresponding X-ray diffraction and scattering patterns are characteristic of molecular poly-crystals with a significant degree of disorder.

Compared to B-DNA, the A-DNA form is a wider right-handed spiral with a shallow, wide minor groove and a narrower, deep major groove. The A form is observed in non-physiological conditions in partially dehydrated samples of DNA, while in the cell it may be observed in regions of DNA and RNA strands. Conformational changes in DNA have been observed to be modified by methylation and have been shown to undergo a conformational change in the Z-form.

ЖЕЛУДОК



...that
...observed
...observed in
...that DNA
...DNA, especially
...chemical
...of polypeptides

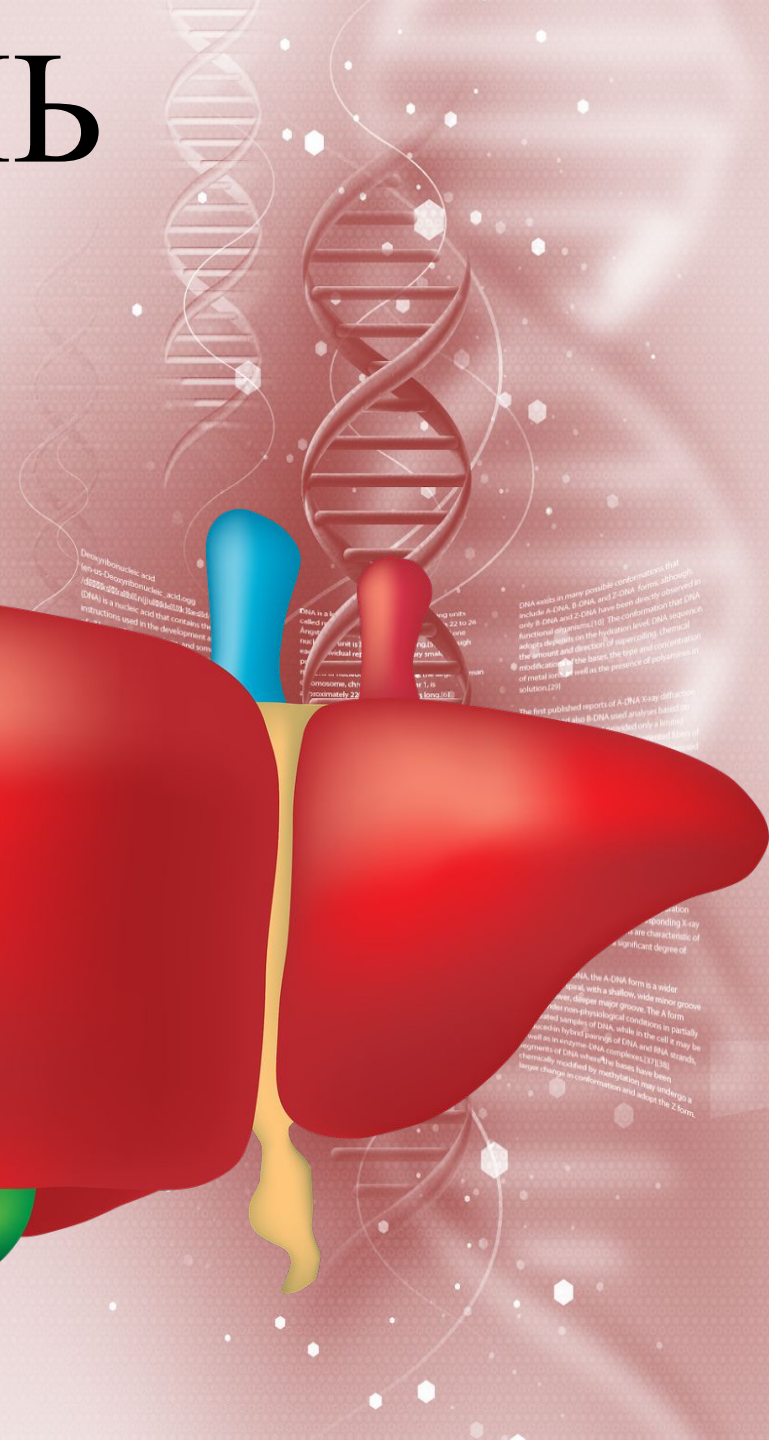
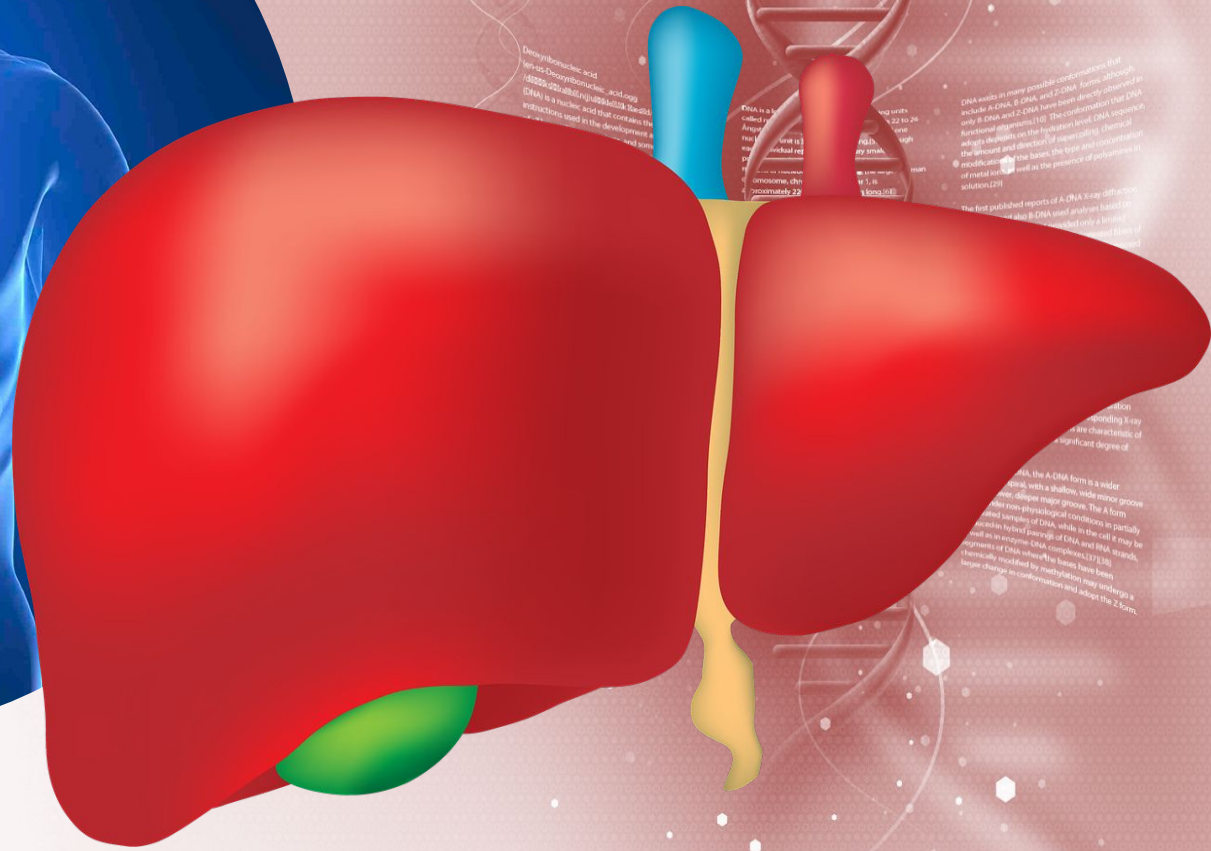
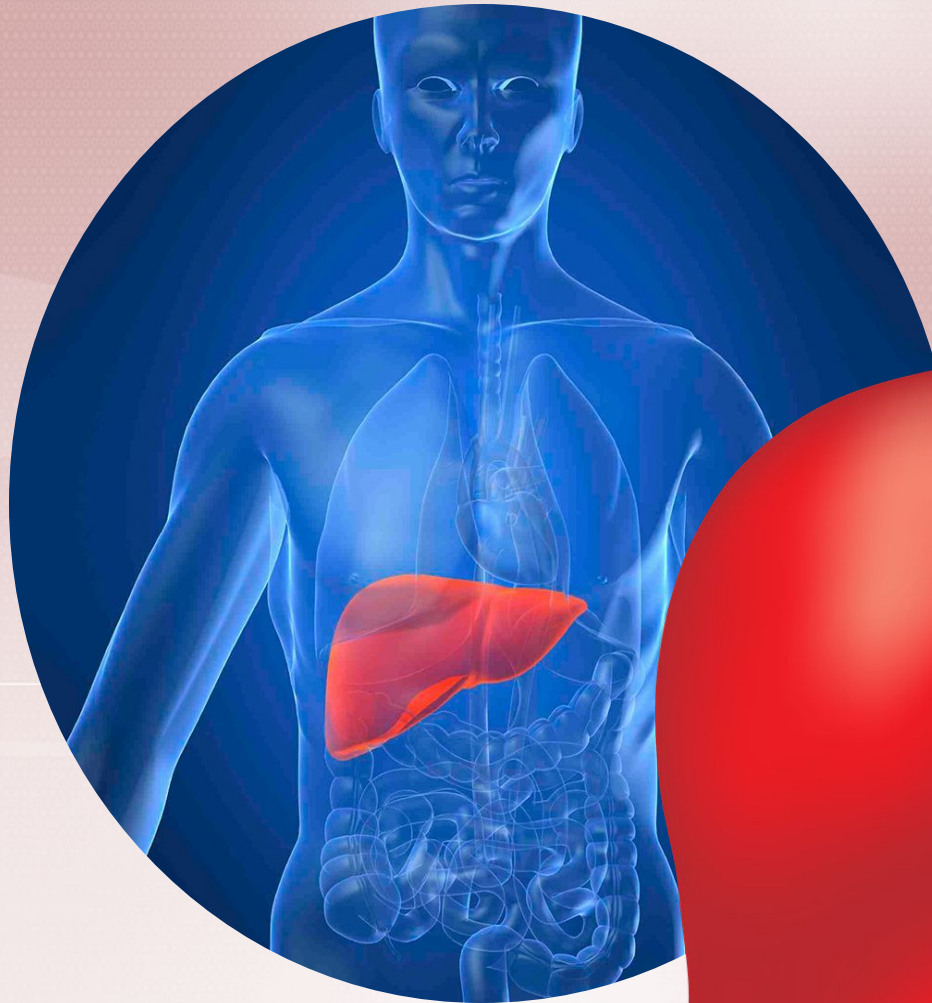
...diffusion
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...common under the
...will be found
...the
...high hydration
...depending on the
...characteristic of
...the degree of

...is a wider
...the minor groove
...The A form
...is in partially
...the salt it may be
...of DNA strands,
...17(136)
...has been
...undergoes a
...from the Z-form.

ПЕЧЕНЬ



КРОССВОРД

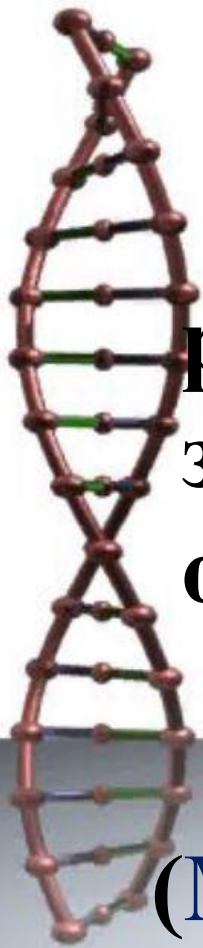


DNA exists in many possible conformations that include A-DNA, B-DNA, and Z-DNA. Forms observed in cells are B-DNA and Z-DNA have been directly observed in functional oligonucleotides. The conformation that DNA adopts depends on the hydration level, DNA sequence, which depends on the hydration level, chemical environment, the amount and direction of supercoiling, chemical modification of the bases, the type and concentration of metal ions, as well as the presence of polyanionic solutes (21).

The first published reports of a DNA X-ray diffraction pattern— and that DNA used analyses based on Patterson transforms that provided only a limited amount of structural information for oriented fibers of DNA (19)(31). An alternative approach was proposed by Wilkins et al. in 1933 for the study of the DNA fiber. The chain of atoms in the DNA molecule is broken up into other units, such as a sugar, a phosphate, and a base, and each is assigned a scattering factor. The structure was a double helix (7).

Although the B-DNA form is most common under the conditions found in cells, it is not a well defined conformation but a family of related DNA conformations (4) that occur at the high hydration level present in living cells. Their corresponding X-ray diffraction and scattering patterns are characteristic of disordered structures (3)(36).

Compared to B-DNA, the A-DNA form is a wider, more compact, right-handed spiral with a shallow, wide minor groove and a deep, narrow major groove. The A form is observed under non-physiological conditions in partially dehydrated samples of DNA, while in the cell it may be induced in an enzyme-DNA complex (17)(36). Chemical modifications of DNA, such as the presence of methyl groups, have been shown to undergo a conformational change in conformation and adopt the Z-form.



1. Печень – принимает самые разнообразные сигналы – звуки, запахи, изображения, распознает и обрабатывает их .

(Мозг – принимает самые разнообразные сигналы – звуки, запахи, изображения, распознает и обрабатывает их.)



2. Наше сердце размером с горошину.

(Наше сердце размером немного больше кулака.)

3. Наш кишечник тянется почти на 3 метра.

(Наш кишечник тянется почти на 8 метров.)



4 .Печень вырабатывает желчь, которая поступает в кишечник и (+) помогает переваривать пищу .

5.Мы вдыхаем углекислый газ, а выдыхаем кислород.

(Мы вдыхаем кислород, а выдыхаем углекислый газ.)