[Age-related changes in the heart rate variability and hemodynamics shown by aboriginals in dependence on the leading type of vegetative nervous regulation].

https://arctichealth.org/en/permalink/ahliterature260915

Author: A L Maksimov
              A N Loskutova

Source: Ross Fiziol Zh Im I M Sechenova. 2014 May;100(5):634-47

Date: May-2014

Language: Russian

Publication Type: Article

Keywords: Adolescent
              Age Factors
              Blood Pressure - physiology
              Cold Climate
              Ethnic Groups
              Female
              Heart - physiology
              Heart Rate - physiology
              Hemodynamics - physiology
              Humans
              Male
              Parasympathetic Nervous System - physiology
              Russia
              Stroke Volume - physiology
              Sympathetic Nervous System - physiology

Abstract: We examined native minority adolescents (aborigines) to study somatometric and cardiohemodynamic characteristics in dependence on the leading type of vegetative nervous system. As result from the study, the age-related morphofunctional changes observed during the examined period of ontogenesis can be considered as heterochronic. Of note that, the hopping periods which occur in changes of somatometric and heart rate variability indices, can differ in dependence on the prevailing type of vegetative nervous system. Found that, the most number of reliable changes in vegetative nervous regulation is typical for vagotonic people at the age of 15, compared to the earlier ages. Apparently, this characterizes the conversion to decrease in activity of parasympathetic and increase in sympathetic component of vegetative regulation experienced by vagotonic examinees in the mentioned period. As regards normo- and sympathotonic examinees, no pronounced age-related change was found at the age of 13-17.

PubMed ID: 25669102 View in PubMed
[Effect of cold weather training on the thyroid gland and parameters of lipid metabolism in long-term residents of the northeast of Russia].

https://arctichealth.org/en/permalink/ahliterature185351

Author: A L Maksimov
        A L Gorbachev


Language: Russian

Publication Type: Article

Keywords: Adaptation, Physiological
          Adult
          Cold Climate
          Female
          Humans
          Hyperplasia
          Lipid Metabolism
          Lipids - blood
          Male
          Middle Aged
          Siberia
          Thyroid Gland - pathology - physiology

PubMed ID: 12751223 View in PubMed ☰
Features of hormonal status in aborigines of Northeast Russia as a function of the level of hypoxic resistance.

https://arctichealth.org/en/permalink/ahliterature210141

Author: T P Batosh
A L Maksimov

Source: Fiziol Cheloveka. 1997 Jan-Feb;23(1):5-9

Language: Russian

Publication Type: Article

Keywords: Adaptation, Physiological
Adolescent
Adult
Anoxia - physiopathology
Continental Population Groups
Hormones - physiology
Humans
Oceanic Ancestry Group
Russia

PubMed ID: 9162658 View in PubMed
Residents of the Extreme North, in total 255 males and 72 females were examined to study morpho-fuctional changes occurring in dependence on the area of residence. It was found that the subjects who recide in the towns of Magadan and Susuman demonstrated adaptive changes in somatometric parameters as well as in functioning of the body cardio-respiratory and gas-transporting systems that can be considered as a compensatory response providing the body energy balance and homeostasis maintenance at the level the unfavourable environmental factors.
Abstract: In the conditions of the northern region there was performed the comparative study of indices of the physical development and state of the cardiovascular system in young male European subjects, born in the city of Magadan in the 1-2 generation over a period from 2004 to 2013. The main tendencies of physical development of young male subjects in the city of Magadan were established to be the ongoing acceleration of growth process, asthenization and dysharmonization of the somatotype. It was determined increase of systolic and diastolic pressure during the last decade. Confirmed changes of cardiohemodynamics data on the back of aggravation of physical development and ongoing somatotype asthenization were shown by young male subjects, born in 90-ies of the last century. It was revealed that over the past 10 years there has been an increase in systolic and diastolic blood pressure indices. Established by us the changes in the indices of cardiac hemodynamics on the background of deteriorating physical development and ongoing asthenization of the somatotype appeared to be more pronounced in young men born in the 90-ies of the last century.
Peculiarities of physical development and state of the cardiovascular system in young males from various districts of Northeast of Russia.

Author: I V Averyanova
A L Maksimov

Source: Gig Sanit. 2017; 96(2):162-5

Language: Russian

Publication Type: Comparative Study

Journal Article

Keywords: Adaptation, Physiological
Adolescent
Adolescent Development
Anthropometry - methods
Body Constitution - ethnology
Cardiovascular Physiological Phenomena
Cold Climate
Environmental Exposure - analysis
Health Status Disparities
Humans
Male
Population Groups - ethnology
Russia

Abstract: The comparative research was carried to study basic indices of physical development and cardiovascular system in Aboriginals and north-born Europeans of different areas of Russia’s northeast (Chukotsky Autonomous District, Magadan Region). According to most examined morphofunctional characteristics no significant differences were found between the groups of subjects that testify to the formation, under the current social conditions, of convergent adaptation processes typical for the two ethnic cohorts from the observed areas of residing. High percentage of asthenia in body constitution of young residents from Magadan Region was common and mostly demonstrated by Aboriginals of the Magadan city.

PubMed ID: 29446604 View in PubMed

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Abstract: In conjunction with the MARS-500, a monthly monitoring of several morphofunctional parameters was performed in 19 Caucasoid volunteers born in the Magadan region over the period of 18 months. The standard procedures were used for somatometric examination and evaluation of the respiratory and cardiovascular functions. The greatest straining of these body systems was stated in wintertime. However, during summer both systolic and diastolic pressure was also high when compared with people living in the center and north of European Russia, which may infer a significant effect of seasonal variations in the Magadan environment and climate on human organism throughout the year.
Besides the pattern of distribution of the basic extensive characteristics reflecting the actual health status of the Chukotka and Magadan district population, adequate mathematical models describing the time course of some of the examined demographic processes were developed in the course of a comprehensive study of the health parameters and demographic structure of the population of the North-Eastern Russia. A prediction of the situation up to the year 2015 was made, using these models. Ranging of the natural and social factors by their influence on the health status and demographic parameters of the Extreme North was carried out.

PubMed ID: 9244581 View in PubMed ☝
[The characteristics of the adaptive adjustments in the participants in the Soviet-American Bering Bridge expedition. I. The energy aspects of adaptation].

Author: A A Aidaraliev
       A L Maksimov
       A Ia Sokolov

Source: Fiziol Cheloveka. 1991 May-Jun;17(3):137-44

Language: Russian

Publication Type: Article

Keywords: Adaptation, physiological - physiology
          Antarctic Regions - ethnology
          Cold Climate
          Continental Population Groups
          Energy Metabolism - physiology
          Humans
          International Cooperation
          Inuits
          Male
          Oceanic Ancestry Group
          Physical Endurance - physiology
          USSR - ethnology
          United States - ethnology

PubMed ID: 1894096 View in PubMed