Mouth closage id est mandible lifting appears due to two-sided symmetric activity of masseters, temporal and medial pterygoid muscles though muscles work non-symmetrically, with their bigger activity at the working side during the mastication. The gravitation action to mandible is equaled with the temporal muscles positive tone. They say that the latest ones play important role in the mandible positioning in the space. Also masseters and medial pteryoid muscles are activated at the teeth closage. Mouth opening or mandible lowering is performed due to suprahyoid muscles (digastric muscle anterior belly, omy-hyoid and mylohyoid one) with the lateral pterygoid muscles participance. Suprahyoideal muscles are attached to the mandible and hyoid bone. When hyoid bone is fixed due to subhyoid muscles than suprahyoid muscles can participate in mandible lowering. Mandible symmetric protrusion (movement forward) is achieved by lateral pterygoid muscles two-sided action. Mandible retrusion (movement back) is performed by temporal muscles posterior part, suprahyoid muscles and masseter deep fibers. Laterotrusion (mandible shift on the right or on the left) takes place at contralateral pterygoid muscle contraction as well as ipsylateral lateral pterygoid muscle contraction. Though laterotrusion is usually combined to the protrusion on opposite side while antero-lateral movement forming.

## PHYSICAL ACTIVITY AND OTHER CAD RISK FACTOR

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CAD incidence is lower among Lowa farmers who were compared with less physically active nonfarmers. The farmers smoked rewer cigaretts and consumed lesser amounts of alcoholic beverages than did nonfarmers. The Harvard Alumni Study evidenced that men not engaged in a lifetime of participation in LTPA had a 35 percent greater risk of hypertension than did their physically active counterparts.

Evidense that physical activity may effect multiple changes in other CAD risk factors is shown indirectly by the North Karelia project, where an increased incidence of CAD events during a six-year follow-up period was evidenced in sedentary men when compared to men who had higher levels of LTPA. However, this relationship was weakened after adjusment for cigarette smoking, serum cholesterol, and blood-pressure levels, and the extent of participatiopn in a network of social contact, such as club memberships and friends.

A variety of mechanisms, are suggested to explain how physical activity may reduce CAD rask by affecting change in known CAD risk factors. Besides inducing favorable changes in plasma lipids and lipoproteins, physical activity could reduce blood pressure, improve tissue's oxygen utilization by increasing both cardiac efficiency and tissue oxygen extraction, or improve blood flow by altering blood rheology.

## INFECTIOUS DISEASES MORBIDITY INDEXES IN A MILITARY GARRISON "DESNA" FOR THE 11-YEARED PERIOD

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The topic of infection morbidity in part on influenza, acute respiratory viral infections, pneumonias as well represents a subject of the attention for the theoreticists and clinicians in Ukraine and even far from it especially during last months. It is non-occasional, that these infections are distributed especially in the places of people significant accumulation. Military units belong to them of course.

There was performed a review of morbidity on some infectious diseases in a Study Center "Desna" near Kiev from 1998 till 2009 as well as monthly-made analysis of morbidity on pneumonia and acute respiratory diseases from May till January the 2010th.

Morbidity on pneumonia was 8-10 promille in the spring 2009, from 1 till 18 promille in summer with a significant firing at the summer beginning, in autumn – from 2 till 14 promille with its peak at the end of September, in winter – it rose from 3 promille till 22 in the middle of December and then lowered up to 4 promille at the end of January. So, morbidity peak on pneumonia was in

December while its minimum – in August. Morbidity on acute respiratory viral infections in spring was fluctuating from 12 till 31 promille, in summer – from 10 till 35,5 promille with the maximum at the end of July and minimum at the end of August; it was in autumn from 4 promille in October till 100 promille in the middle of September. The fluctuations were maximal in winter: from 5 promille in the first days of December and 185 promille at the end of December. Morbidity peak on acute respiratory diseases was observed at the end of December and minimum was mentioned in October.

Thus, one-digit dynamics of morbidity on some infectious diseases was absent in a Study Center "DESNA" during an account period from 1998 till 2009 but acute respiratory diseases and pneumonia high morbidity was highly-distinguished in winter. We recommend restricting visiting the children to the parents in the places of military service in winter as well as children coming back home especially under extreme epidemic situation like this year.

## TO THE QUESTION ABOUT MASTICATORY MOVEMENTS REGULATION

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CNS activates separate motor units of those muscles which are required for the definite movement performance (A.G.Hannam, B.J.Sessle, 1994, I.Klineberg, R.Jagger, 2004). All movements can be divided into conscious, reflectory and rhythmical. CNS different parts participate in masticatory movements formation. Facial motor cortex represents brain cortex highest focus taking part in conscious movements generation. When the patient is asked to protrude his tongue and to open his mouth (for example, for the offprint taking) programs set choice and activation (similar to the computer programs) appear in basal ganglia. These programs send the signals in primary motor cortex in part in its facial zone. These signals contain the information about motor units which are essential to be activated fro the definite movement performance as well as about the sequence of their activation. Facial primary cortex contains brain cortex specific zones the fibers of which pass through pyramidal pathway with shifting to alpha-motoneurons (for instance, through interneurons). Fibers every exit zone from facial primary cortex activates separate simple movement, for example, tongue movement forward, tongue replacement or the jaw shift on the right or on the left, mouth angle rising, mandible lowering. One and the same movement can be performed at facial primary cortex different zones participation. Cerebellum co-ordinates constantly the movements through the entrance signals coming into the motor zones. Every movement correction can be realized through shorter pathways (comprising the neurons less amount) the big number of which is origined from brain stem.

Reflectory nervous ways encourage movements more exact performance and also can be used by higher motor centers for performing more complicated movements. Mandibular reflex and mouth opening reflex belong to them.

Rhythmic movements possess the features both of conscious and reflectory movements (J.P. Lund, 1991). Reflectory side of the rhythmic movement is in following: one must not think about the movement for its performance. For instance, we can masticate, breathe, swallow, walk without thinking about these processes but we are able to change these movements velocity and intensiveness at any instant consciously. Rhythmic movements performance and regulation are realized with the participation of especial spine and stem neurons sets. Every set is designated as a Route Central Generator (RCG). Mastication RCG is located in a medullary-pontic reticular formation. Swallowing is not a rhythmical process but it is also controlled with RCG located in a medulla oblongata.

Very active feed-back reactions are realized in oral cavity. Sensory feed-back is made at oral cavity mechanoreceptors. Foe example, parodont receptors transmit the signals about teeth contact level and direction; mucosa receptors give the information about food contact with the mucosa. Muscular spindles signalize about the muscle length and its length changing velocity at the mouth closage. Tendineal organ of Golgi tells about the enforcement developing with the muscle while the temporal-mandibular joint mechanoreceptors transmit the signals about the joint position.