deep changes in the cytoplasm after 72 h and 96 h. Immunofluorescence demonstrated an high signal of procollagen α1 type I around nucleus. This localization and the intensity of the signal decreased with the treatment and are in agreement with our molecular biology data which demonstrated a decrease of procollagen α1 type I both in its synthesis and expression.

These findings suggest that the sub-lethal concentration of HEMA tested has toxic effects on gingival fibroblasts which are generally underestimated by standard cell viability assays. A combination approach of morphological and immunolabeling methods could provide more valuable information about the toxic effect of resin monomers.

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Meat efficiency and interior Simmental and Red-Motley Swedish bovines at fattening of low concentrates dilts in conditions of intensive agriculture

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The purpose of this work is studying of degree of display of a genotype of meat efficiency Simmental and Red-Motley Swedish bovines at limited use and absence of concentrates with introduction in their diet of the high-energy and vegetative forages prepared on special technologies. On the basis of complex experimental investigations the "know now" of a high quality beef is proved by use of genetic potential zoned import breeds on low concentrate diet in a condition of intensive breeding. Dynamism of changes and level methobolises in farding bag and in blood of animals is shown during all cycle of final fattening (180 days) at replacements in diets of grain forages by other vegetative components. The theoretical substantiation of preservation of high meat efficiency is given at rational use of grain forages that in comparative aspect is a theoretical basis at development of a work cycle intensive fattening of bovines on meat from partial and full indemnification forage fodder the forages prepared from Lucerne, Corpo and Sunflower, economic efficiency fattening of Simmental and Red-Motley Swedish bovines is determined. Real opportunities of decrease in the change of grain forages on the fattening final period (225-450 kg on one animal) are revealed.

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Feature of growth, development, meat efficiency of boviness Simmental and Limusin beeds and their hybrids

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The purpose of work was the comparative estimation of economic-useful attributes of bovines Simmental and Limusin breeds and their hybrids. For achievement of this purpose the following tasks have been put: to determine actual consumption of forages on the period of growing of experimental animals, to study frature of growth and development thoroughbred and hybreed bovines up to 18 monthly age, to investigate hematological parameters of young growth of genotypes, to estimate meat efficiency of bovines, qualities of meat in view of efficiency of conversion of nutrients of a forage in food efficiency, to establish optimum age of realization of bovines on meat on the basis of parameters of meat efficiency and qualitative

structure of products of slaughter, to state an economic estimation of growing of animal various genotypes till 15-18 months. In result for the first time in Central Black Soil Zone of Russia complex research of features of growth, development, meat efficiency thoroughbred and hybrid the young growth received from crossing Simmental of breed with bulls of Limusin breed is carried out. Features of formation of meat efficiency thoroughred and hybrid bovines till 15 and 18 monts are investigated. Opportunities of additional increase in manufacture of a high-quality beef are revealed due to growing Simmental-Limusin bovines. From hybrid bovines for 18 months it is in addition received 26-61 kg of a gain per one animal that provides increase in a level of profiltability of production of a beef at 6,0-14,5%.

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Online teaching by an anatomy web atlas

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Students in the 21st century have greater and greater expectations towards the teaching quality of universities, whereas the universities, e.g.: anatomy institutes tend to provide students with broader and broader basic knowledge. Besides the lessons the role of the home study will increase. The books meet a concurrency by the wide range of anatomy study programs available on CDs or DVDs. However, similarly to the books these softwares are also static without the possibility of updating and modernizing the content. Moreover, the price of the books and softwares takes great charge on students' budget. The internet may give a solution for both problems. Our institute started to develop an online accessible anatomy web atlas called HuMo WebAtlas. As compared to other similar websites our web atlas allows not only for the passive access to dissection pictures and histology slides, but the students have the opportunity to improve and eventually even spread out the data to other students. It gives them a great chance to get involved in teaching.

Our project is based on the php 5 scripting language and uses a MySQL 4.1 database server. Thus, the development and the operation is cost-effective, because no extremely expensive softwares and investment are necessary. At the same time, owing to the independent picture and text data storing structure constructed by us, relatively small storage, memory and processor capacity are needed. The advantage is that our system can serve more users with the same resource. The content development is made easy by a user-friendly interface which is available after user authentication. Depending on the user level the system waits for supervision or transmits the changing immediately. The modular buildup ensures an easy and fast code improvement. The user interface utilizes separate dictionary database, to enable the further improvement of the currently trilingual (Hungarian, English, German) atlas. The software can store the labeling of any structure on the images that might be useful in the anatomy teaching (dissection, histology, CT, MRI, etc. pictures). Students can find the relevant information fast and easily, due to the combined thematic and keyword search scripts.

In the near future we plan to involve other related subjects such as radiology and pathology in our project to obtain an integrated database which is equally useful for students in the academic and clinical years.

Our web-atlas is accessible at http://humo.usn.hu with the password: "malleus" The project is sponsored by HEFOP (HEFOP-3.3.1-P.-2004-06-0014/1.0).

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