Wielonienasycone kwasy tłuszczowe (PUFA) w badanym surowcu stanowiły średnio 36%, przy czym mięśniem o największym ich udziale był *M. gastrocnemius pars externa* (40,74%). Wśród PUFA w największej ilości występowały kwasy linolowy (C18:2n6c) i arachidonowy (C18:4n6). Zawartość kwasu linolowego była zbliżona we wszystkich rodzajach mięśni i średnio stanowiła 18% sumy kwasów tłuszczowych. Natomiast najwięcej kwasu arachidonowego (20,01%) stwierdzono w mięśniach podudzia (*M. gastrocnemius pars externa* i *M. gastrocnemius pars interna*).

Podsumowanie

Mięśnie emu charakteryzują się niską zawartością cholesterolu i stanowią bogate źródło wartościowych z punktu widzenia żywieniowego wielonienasyconych kwasów tłuszczowych. Na szczególne uznanie zasługuje wysoka zawartość kwasu arachidonowego, który jest prekursorem wielu eikozanoidow, regulujących funkcję większości narządów i układów. Poza tym należy wspomnieć, że poza rybami i olejem z ryb, mięso jest jedynym znaczącym źródłem tego kwasu w diecie.

Literatura

- 1. Beckerbauer, L.M., Thiel-Cooper, R., Ahn, D.U., Sell, J.L., Parrish Jr., F.C., & Beitz, D.C. (2001). Influence of two dietary fats on the composition of emu oil and meat. *Poultry Science*, 80, 187–194.
- Naveena, B.M., Sen, A.R., Muthukumar, M., Girish, P.S., Praveen Kumar, Y., & Kiran, M. (2013). Carcass characteristics, composition, physico-chemical, microbial and sensory quality of emu meat. *British Poultry Science*, 54 (3), 329–336.
- 3. Pegg, R.B., Amarowicz, R., & Code, W.E. (2006). Nutritional characteristics of emu (Dromaius novaehollandiae) meat and its value-added products. Food Chemistry, 97, 193-202.
- 4. Wang, Y. W., Sunwoo, H., & Sim, J. S. (2000). Lipid characteristics of emu meat and tissues. Journal of Food Lipids, 7, 71-82.
- 5. Wood, J.D., Richardson, R.I, Nute, G.R., Fisher, A.V., Campo, M.M., Kasapidou, E., Sheard, P.R., & Enser, M. (2003). Effects of fatty acids on meat quality: a review. *Meat Science*, 66, 21-32.

Effect of feeding slaughter pigs with food enzymes

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Actuality

During the lasty earst here have been created new types of enzymes, which are made on the basis of scientifi cand biotechnological PE "BTU-Center" (Ladyzhyn, Vinnytsiaregion) and in tended for use in animal breeding. They require scientific justi fication for the use in animal feed. The purpose of this work was, along with the study of productivity, to summarize product data of the slaughter of young pig sin the enrich ment of diets by new enzyme products.

Research Methodology.

Research conducted by similar groups of young pigs of large white breed. After a 15-day comparison period, during the main experiment period the diet of animal research groups were treated with enzymes mat serobatsylin, mat seraza, MEK-1, MEK-2, IEC-3, IEC-5, and minovitminazain certaindoses. The control groups did not receive enzyme products. Young pigs were growntor each a live weight of 100 kg and more. Atthe control slaughter of pigs they determine dante slaughter weight, carcass weight, slaughteroutputandcarcassoutput, weightofinternalfat.

Results. The use of enzymes productsin feeding pigs invarious dose shas a positive effecton slaughter performance. Certa in drug suseis some what different. Thus, increasing the slaughter mass of young pigs by feeding three doses of matserobat sylinuis respectively 9.5, 8.4

and 8.5 kg or 12.5, 10.7 and 10.9% compared with the control. The weight of carcasses increasedby 7.4, 7.5 and 6.7 kg. Interms of out putand out putslaughter carcasses the reisnosignificant difference between the groups. In accordance with the increase in weight of carcasses of experimental group sittakes place the increase of weight of internal fat (9.9, 1.5 and 4.6%), ie fat which is separated at carcas sescutting. Thus, the three studied doses of matserobat sylinu have approximately the sam eeffect on the in creasein slaughter performance [1].

Mat sears in the diet of young pigs led to an increase in carcass weight "from 16.7% to 20%, while the number of internal fat increased by 13,8-28,9%.

The peculiarity of the application of multy enzym tracks MEK-1 and MEK-2 is that it increases slaughter weight within 5% and the number of internal fat is prevailing benchmark (P <0.05).

When feeding enzyme produts MEK-3 scores were better at doses of 1.0 and 1.5 grams per head per day - slaughter weight and carcass weight increased by an average of 11%, and the weight of internal fat - by 25 and 50%.

Both doses of MEK-5 cause a significant increase in down hole parameters (P < 0.01) increase within 3,5-4,3% slaughter outcome and carcass outcome and does not affect the amount of internal fat.

Introduction of minovitto the diet of young pigs in two doses affects the increase of ante and slaughter weight (P <0.05) to 9.10% increases the weight of mass, does not change the slaughter output, but reduces the weight of internal fat by 12%.

When used minaza in feeding young pigs relatively better performance derived from drug dose of 3 g per 100 kg live weight - there is an increase of slaughter weight and carcass weight (P <0.05) with another dose these figures increased to 8,16-9, 7%. In terms of slaughter product and the amount of internal fat there is no difference between the groups.

Conclusions.

1. The use of enzymes products in feeding young pigs such as matserobatsylin, matseraza, MEK-1, MEK-5 minovit and minaza increases the number of ante, slaughter weight, carcass weight and has no negative impact on the outcomes of products of slaughter.

2. Best indicators of slaughter weight is an increase of 10-12%, provides consuming of matserobatsylin and multyenzymi composition MEK-3.

3. When feeding minovit and MEK-3 carcass weight increased by 9.10%, minaza and MEK-5 - by 11-14%, matseraza - by 16-20%.

References

1. A.V. HutsolTheefficiencyoftheenzymesinfeedingpigs / A.V. Hutsol // CollectedScientificworksof VSAU. - Vinnytsyal, 2004. - Vol. 16. - P. 129-133.

2. Newenzymesinfeedingfarmanimals / [A. V. Hutsol, Y.I. Cyriliv, M. Mazurenkoetc.]. - Vinnyytsa, 2014 - 316 p.