



## American Journal of Anatomy and Physiology (DOI:10.28933/AJAP)



# Associated to the Proteinic Malnutrition on the Physical Mass and the Parameters Mice's Cardiovasculares

Rocha Júnior, R.L<sup>1</sup>; Souza, V.O.N<sup>2</sup>; Andrade, L.D.S<sup>3</sup>; Dornelas, P.E<sup>4</sup>; Leandro, C.V.G<sup>5</sup>; Silva, J.H.C<sup>6</sup>

1Estudante do Curso de Enfermagem UFPE-CAV, 2Doutoranda em Nutrição pelo Programa de Pós-Graduação em Nutrição, CCS-UFPE, Recife-PE, 3Mestranda em Nutrição pelo Programa de Pós-Graduação em Nutrição, CCS-UFPE, Recife-PE, 4Estudante do Curso de Saúde Coletiva UFPE-CAV, 5Docente/Pesquisador do Departamento de Educação Física UFPE-CAV, 6Docente/Pesquisador do Departamento de Nutrição UFPE-CAV.

### ABSTRACT

**Introduction:** The proteinic malnutrition perinatal is able to promote alterations cardiovasculares and in the corporal mass of the progeny. Experimental models of motherly voluntary physical activity (AFV) in cicloergômetro before and during the gestation it seems to reduce the effects of the malnutrition. **Objective:** The objective of the work valued the effects of the proteinic malnutrition and AFV during the period perinatal on the corporal mass and the parameters cardiovasculares of the progeny. **Methodology:** Confirmed Wistar was used (n=8) originating from mothers who before the gestation were arranged individually in cages of AFV by a period adaptativo of 30 days. After this period the rats were classified in two groups in accordance with the daily level of physical activity: Inactive or Active. Next, same they were subjected to the mating and from the first day of pregnancy they received diet normoproteica (NP, 17 % of protein) or hipoproteica (HP, 8 % of protein). In the 30th day of life of the progenies the proceeding is carried out for implant of the catheters in the artery femoral, for subsequent register of the middle blood pressure (PAM), pressure sistólica (PS), pressure diastólica (PD) and cardiac frequency (FC). The results were expressed on average  $\pm$  EPM. Test ANOVA one-way was used and  $p < 0.05$ . All the proceedings were approved by the CEUA/UFPE (23076.021679/2015-87). **Result and Discussion:** In 30<sup>o</sup> dia of life, while analysing the corporal weight it was possible to notice that there was no statistical difference between the groups NP and active HP (NP=66.98 and HP=70.78), on the other side in the group HP and inactive NP it was possible to observe an increase of the corporal mass of the NP likened to the HP (NP=85.81 and HP=51.34). Regarding the parameters cardiovasculares it was noticed that in this age the malnutrition and physical activity are not able to influence. **Conclusion:** The malnutrition is able to promote alterations in the physical mass of the animals where the physical activity manages to reduce these effects. As for the parameters cardiovasculares we notice that there is no alteration between the groups for this moment of the life, they put if it makes necessary to value these parameters at long term.

### Key words:

Malnutrition, Physical Activity, Corporal Mass and Parameter Cardiovascular.

### \*Correspondence to Author:

Rocha Júnior, R.L  
Estudante do Curso de Enfermagem UFPE-CAV

### How to cite this article:

Rocha Júnior, R.L; Souza, V.O.N; Andrade, L.D.S; Dornelas, P.E; Leandro, C.V.G; Silva, J.H.C. Associated to the Proteinic Malnutrition on the Physical Mass and the Parameters Mice's Cardiovasculares. American Journal of Anatomy and Physiology, 2018, 1:1



eSciPub  
eSciPub LLC, Houston, TX USA.  
Website: <http://escipub.com/>