

Effect of a Pulsed Magnetic Field and of First Cold-Pressure Sunflower Oil on Mice

André Bellossi*, Chantal Rocher and Michel Ruelloux

Laboratoire de Biophysique. Faculté de Médecine, 2 Avenue du Pr. Léon Bernard,
35043 Rennes Cedex France. Fax: (33) 2 99 33 68 42. E-mail: bellossi@univ-rennes1.fr

* Author for correspondence and reprint requests

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In previous studies it has been shown that exposure of mice to a 12-Hz 6 mT unipolar square pulsed magnetic field (PMF) suppressed the excess of weight due to application of 1st cold-pressure sunflower oil. This time we considered the effect of oil and/or PMF on the growing curves lifespans of mice. The exposure took place for 30 min 5 days a week, from the 7th week of life to death. The results are 1) a broken slope in the growing curves from the 125th day of aging: the exposed mice were lighter than the controls, keeping the differences between the growing curves needed a repeated exposure all life long; 2) a significant increase in the lifespan of the controls which received oil versus the controls which received water; 3) an increase in the lifespan of the exposed mice versus the non-exposed control batches. On one hand it has been reported that essential polyunsaturated fatty acids found in first cold-pressure sunflower oil played a prominent role in membrane structures and in immune equilibrium. On the other hand, it was shown that oscillating electric fields could activate Na^+, K^+ -ATPase.