

## Figure S1

**Principal component analysis of lipids and rats was determined based on the type of omelette for each tissue.**

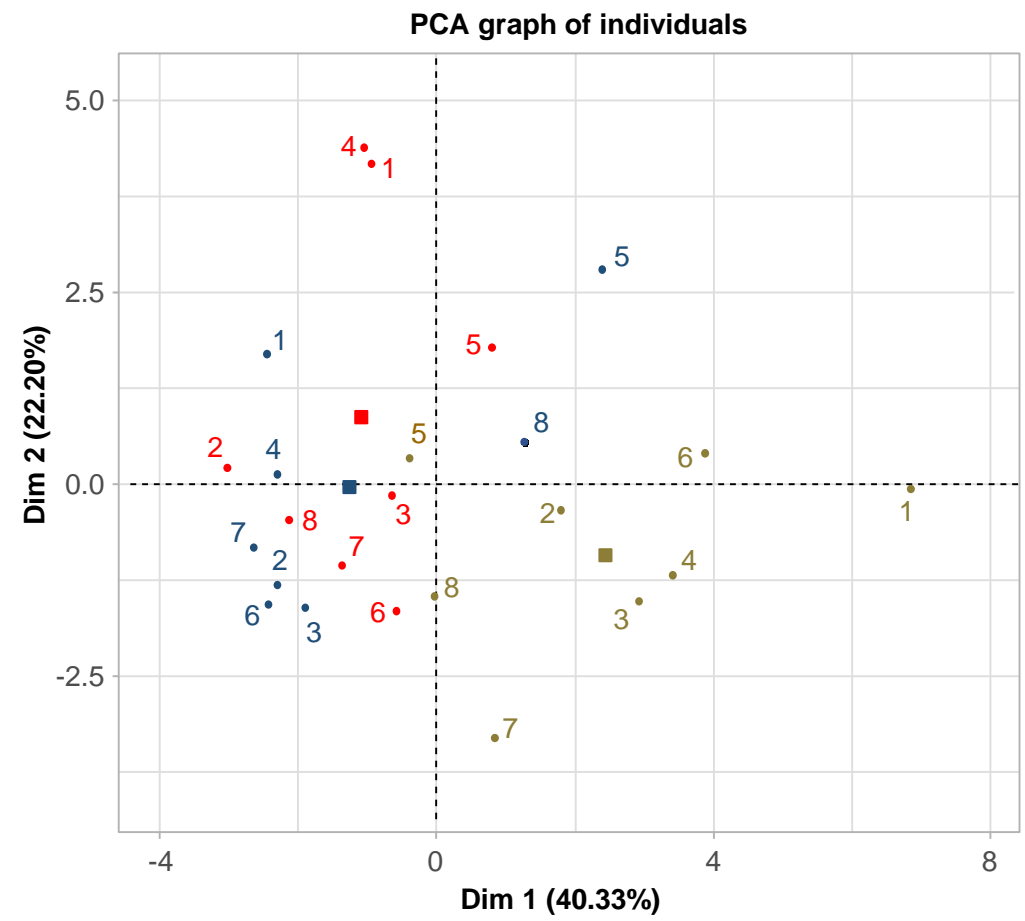
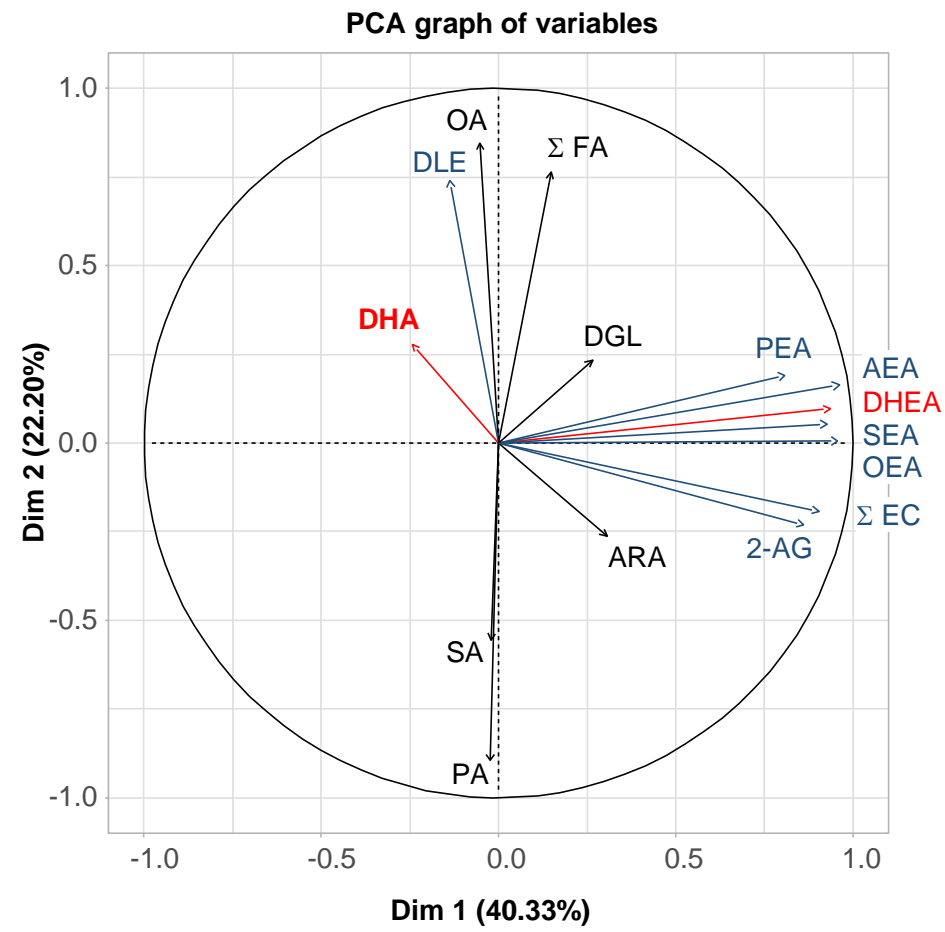
In the brain (**A**), DHA is not particularly well represented nor is it particularly correlated with DHEA or other cannabinoid derivatives. On the other hand, it is negatively correlated with ARA. Concerning the individuals, the control group is distinct from the two other groups supplemented with DHA.

In the heart (**B**), DHA is no more correlated with DHEA or even with other cannabinoid derivatives. On the other hand, the three groups of individuals are distinguished by the analysis of endocannabinoids and N-acyl ethanolamides with their precursor fatty acids.

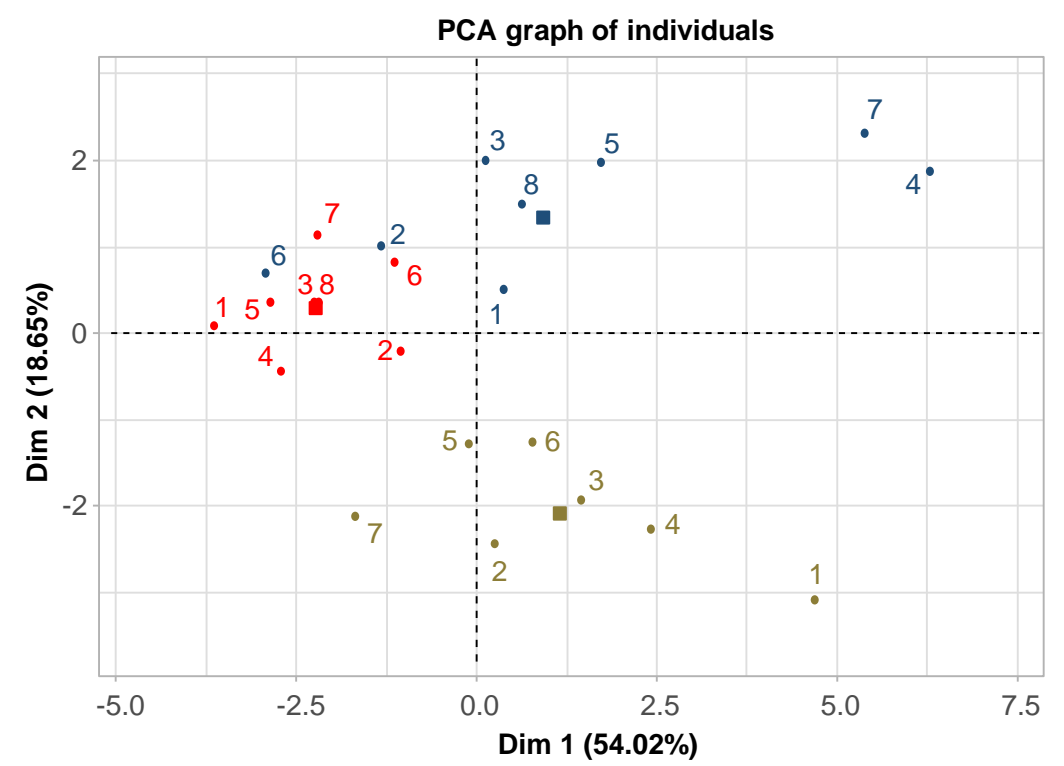
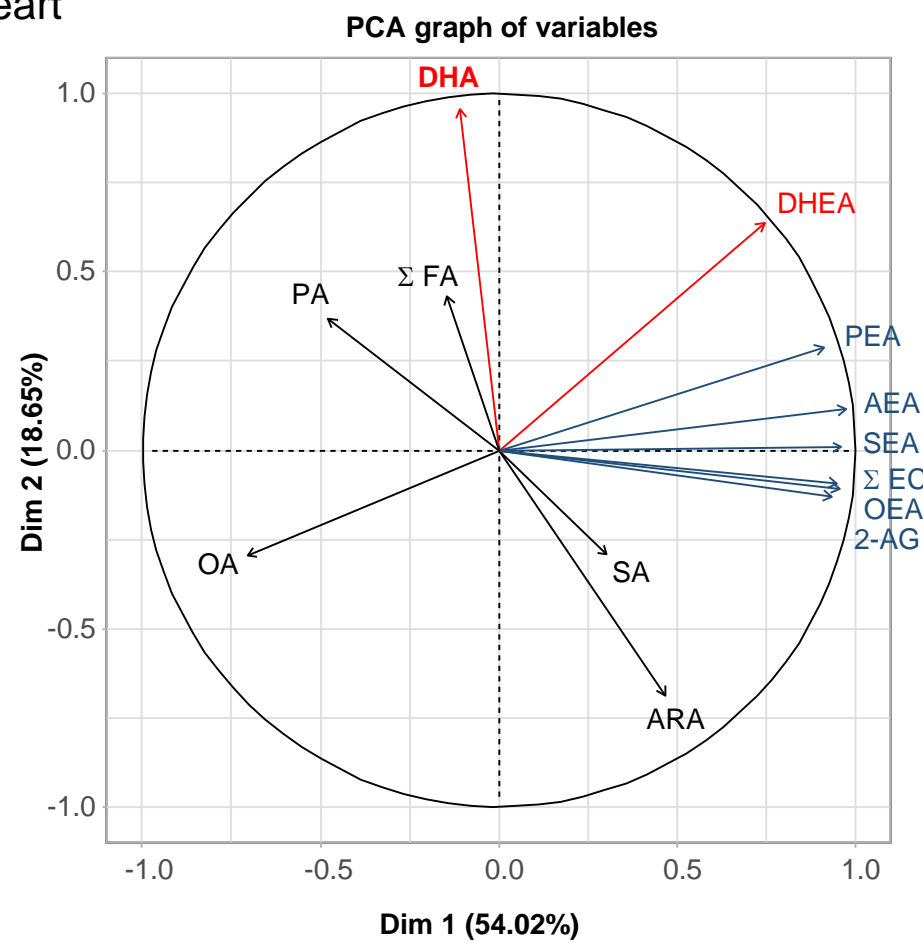
Finally, in plasma (**C**), DHA is positively correlated with DHEA but negatively with 2-AG, OEA and PEA. The groups supplemented with DHA are distinct from the control, but without impact of the encapsulation on the distribution of the individuals.

— DHA and DHEA — Fatty acids — Endocannabinoids and N-acyl ethanolamides ■ Control ■ DHA-O ■ Enc-DHA-O

## A. Brain



## B. Heart



## C. Plasma

