

Article title: Diets high in corn oil or extra virgin olive oil differentially modify the gene expression profile of the mammary gland and influence experimental breast cancer susceptibility

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Electronic Supplementary Material 1:

Supplementary Table 1

Composition of the experimental diets

| Diet composition (g/kg) | Low fat | High corn oil | High olive oil |
|--------------------------|---------|---------------|----------------|
| Proteins (casein) | 180 | 230 | 230 |
| Carbohydrates (dextrose) | 679 | 459 | 459 |
| Lipids: | | | |
| Corn oil | 30 | 200 | 30 |
| Extra virgin olive oil | 0 | 0 | 170 |
| Fibre (cellulose) | 50 | 50 | 50 |
| Mineral mix ^a | 59 | 59 | 59 |
| Vitamin mix ^a | 2.4 | 2.4 | 2.4 |

| Fatty acids in the oils (%) | Corn oil | Extra-virgin olive oil |
|--|----------|------------------------|
| C16:0 (palmitic) | 11.1 | 13.2 |
| C16:1 (palmitoleic) | 0.2 | 1.3 |
| C17:0 (margaric) | 0.1 | 0.1 |
| C17:1 (margaroleic) | 0.0 | 0.2 |
| C18:0 (stearic) | 2.3 | 2.5 |
| C18:1 (oleic) | 31.7 | 73.7 |
| C18:1 <i>trans-double bound</i> (elaidic) | 0.1 | 0.0 |
| C18:2 (linoleic) | 51.3 | 7.3 |
| C18:2 <i>trans-double bound</i> linoleics | 1.3 | 0.0 |
| C18:3 (linolenic) | 0.5 | 0.8 |
| C18:3 <i>trans-double bound</i> linolenics | 0.3 | 0.0 |
| C20:0 (arachidic) | 0.5 | 0.4 |
| C20:1 (eicosenoic) | 0.2 | 0.3 |
| C22:0 (docosanoic) | 0.2 | 0.1 |
| C24:0 (lignoceric) | 0.2 | 0.1 |
| Total saturated | 14.4 | 16.4 |
| Total monounsaturated | 32.1 | 75.5 |
| Total n-6 polyunsaturated | 51.3 | 7.3 |
| Total n-3 polyunsaturated | 0.5 | 0.8 |
| Total <i>trans-double bound</i> isomers | 1.7 | 0.0 |

^a: The composition of mineral and vitamin mixes is given in [1]

[1] Escrich E, Solanas M, Segura R (1994) Experimental diets for the study of lipid influence on induced mammary carcinoma in rats: I – Diet definition. *In Vivo* 8: 1099-1106