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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author; Year** | **Changes in hs-CRP**†† **(mg/L;**  **% of change)** | **Changes in adiponectin**††  **(μg/mL;**  **% of change)** | **Changes in visfatin**†† **(μg/mL; % of change)** | **Changes in NO**†† **(mmol/L;**  **% of change)** | **Changes in GSH**†† **(mmol/L;**  **% of change)** | **Changes in MDA**†† **(mmol/L;**  **% of change)** | **Changes in TAC**†† **(mmol/L;**  **% of change)** |
|  |  |  |  |  |  |  |  |
| Amini *et al*., 2018 (33) | C: 0.1±1.5; (↑2.2%) I: -2.0±0.8; (↓35.0%) | Not applicable | Not applicable | C: 0.8±5.2; (↑1.7%) I: 0.4±3.1; (↑0.8%) | C: 37.8±55.9; (↑6.6%) I: 73.9±45.9; (↑11.5%) | C: 0.2±0.4; (↑8.3%) I: -0.1±0.1; (↓3.8%) | C: 53.9±67.0; (↑6.2%) I: 80.1±35.9; (↑9.6%) |
|  |  |  |  |  |  |  |  |
| Jamilian *et al*., 2018 (34) | C: 0.1±0.7; (↑2.5%) I: -1.2±1.9; (↓28.6%) | Not applicable | Not applicable | C: −1.5±6.3; (↓3.4%) I: 0.3±3.9; (↑0.8%) | C: 24.3±116.4; (↑4.6%) I: −15.5±85.8; (↓2.8%) | C: 0.2±0.6; (↑7.1%) I: −0.4±0.4; (↓13.8%) | C: −2.4±168.2; (↓0.2%) I: 114.6±122.2; (↑11.5%) |
|  |  |  |  |  |  |  |  |
| Mejia-Montilla *et al*., 2017 (35) | Not applicable | C: -0.4±1.2; (↓10.0%) I: 1.4±1.2; (↑35.8%) | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
| Mirmasoumi *et al*., 2017 (36) | C: 0.2±1.5; (↑4.1%) I: -1.6±3.1; (↓32.6%) | Not applicable | Not applicable | C: − 0.5 ± 7.9; (↓1.2%) I: − 2.4 ± 5.3; (↓6.0%) | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
| Mohammadi *et al*., 2012 (37) | C: -0.14±0.8; (↓6.3%) I: -0.15±0.7; (↓6.6%) | C: -0.3±3.4; (↓2.4%) I: 1.7±2.8; (↑14.4%) | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
| Nadjarzadeh *et al*., 2015 (38) | Not applicable | C: -0.51±1.6; (↓ 9.9%)  I: 1.17±2.1; (↑26.3%) | C: 0.04±0.5; (↑0.6%)  I: 0.07±0.4; (↑ 1.0%) | Not applicable | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
| Rafraf *et al*., 2013 (39) | Not applicable | Not applicable | C: -0.01±0.1; (↓0.9%)  I: 0.03±0.1; (↑2.8%) | Not applicable | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
| Rahmani *et al*., 2016 (40) | Not applicable | Not applicable | Not applicable | Not applicable | C: 43.3±66.3; (↑8.5%)  I: 19.5±39.3; (↑3.7%) | C: -0.008±0.6; (↓0.3%)  I: -0.3±0.4; (↓10.3%) | C: 5.9±116.2; (↑0.6%)  I: 89.4±108.9; (↑10.4%) |
|  |  |  |  |  |  |  |  |
| Talari *et al*., 2018 (41) | C: 0.23±0.7 (↑8.9%)  I: -0.39±0.9(↓13.6%) | Not applicable | Not applicable | C: 0.1±2.6 (↑0.2%)  I: 1.7±4.7 (↑3.4%) | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
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**Supplementary material 2.** Changes on biomarkers of the studies investigating inflammation and oxidative stress markers concentrations from omega-3 fatty acid supplementation.

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| **Author; Year** | **Changes in hs-CRP**†† **(mg/L;**  **% of change)** | **Changes in adiponectin**†† **(μg/mL;**  **% of change)** | **Changes in visfatin**†† **(μg/mL; % of change)** | **Changes in NO**†† **(mmol/L;**  **% of change)** | **Changes in GSH**†† **(mmol/L;**  **% of change)** | **Changes in MDA**†† **(mmol/L;**  **% of change)** | **Changes in TAC**†† **(mmol/L;**  **% of change)** |
| Vargas *et al*., 2011(42) † | C: -0.2±0.7 (↓5.7%)  I: -0.4±0.8 (↓11.1%) | C: -0.3±1.7 (↓4.6%)  I: 1.0±1.1 (↑13.3%) | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
|  |  |  |  |  |  |  |  |
| Vargas *et al*., 2011 (42) | C: -0.2±0.7 (↓5.7%)  I: 0.5±0.8 (↑16.1%) | C: -0.3±1.7 (↓4.6%)  I: -0.4±1.8 (↓5.0%) | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

C: control; I: intervention; GSH: glutathione; hs-CRP: high-sensitivity C-reactive protein; MDA: malondialdehyde; NO: nitric oxide; TAC: total antioxidant capacity.

†Fish oil supplementation group.

††Biomarkers concentrations expressed as means and standard deviations.