Electronic Supplementary Material (ESI) for Food & Function.

Supplemental Figure 1. Effect of apple extracts on macrophages. Raw 264.7 were treated with 10^{-2} and 10^{-5}g/L of apple extracts with either EtOH or DMSO for 1h and then treated or not with LPS for further 23h. Then, IL-6 production was quantified. In diagram, x-axis and y-axis expressed percentage response values of ethanol and DMSO extracts, respectively. In each diagram, high (H) and low (L) concentrations are represented and each dot is the mean of a triplicate of 2 biological repetitions per condition. Variations of 20% of responses (included in dot lines) were considered not biologically significant. This panel displayed results of evidenced apple varieties and storage conditions.

Supplemental Figure 2. Whole bioactivity variance. Two dimensional plots for dimensions 2 and 3 from PCA analysis showing (A) individual factor map and (B) variables factor map. (A) Apple samples and confidence ellipse at 95% are colored according to the variety. Apple samples are named according to the variety (GA: Gala, GD: Golden Delicious, GS: Granny Smith and PL: Pink Lady), the storage conditions (HV: harvest, CC: classic cold, CA: controlled atmosphere and XO: extreme low oxygen) and the concentration used for the test (H: high or L: low). (B) Variables are named according to the cell type (HUVECs, HASMCs, HepG2, 3T3-L1 = X3T3.L1 and Raw = Raw 264.7), the test (OS: oxidative stress, CP: cell proliferation, CA: cell apoptosis, LA: lipid accumulation and IL.6: Interleukin-6) and the type of extract (D: DMSO or E: Ethanol).

Supplemental Figure 3. Whole bioactivity variance. Two dimensional plots for dimensions 1 and 2 from PCA analysis showing (A) individual factor map and (B) variables factor map. (A) Apple samples and confidence ellipse at 95% are colored according to the storage conditions. Apple samples are named according to the variety (GA: Gala, GD: Golden Delicious, GS: Granny Smith and PL: Pink Lady), the storage conditions (HV: harvest, CC: classic cold, CA: controlled atmosphere and XO: extreme low oxygen) and the concentration used for the test (H: high or L: low). (B) Variables are named according to the cell type

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