

## Antioxidant Properties of Buffalo-Milk Dairy Products: A $\beta$ -Lg Peptide Released after Gastrointestinal Digestion of Buffalo Ricotta Cheese Reduces Oxidative Stress in Intestinal Epithelial Cells

### S1. DPPH• Radical Scavenging Activity

The DPPH• scavenging activities were determined according to the method previously described by García-Moreno et al. (2014), with some minor modifications. Briefly, a volume of 100  $\mu$ L (concentration range 0.3–10.0 mg mL<sup>-1</sup>) of each sample solution was added to 100  $\mu$ L of DPPH• radical ( $5 \times 10^{-5}$  M) in methanol. The mixture was briefly sonicated then left to react for 30 minutes in the dark at room temperature. Then, the absorbance of the reaction mixture was measured at 517 nm. A control solution was prepared by diluting the DPPH solution with methanol in a 1:1 ratio ( $A_{\text{DPPH\_control}}$ ). EC<sub>50</sub> values were measured as the sample concentration (mg/mL) giving a 50% decrease of the DPPH radical initial concentration and were calculated according to Equation (1):

$$\text{DPPH inhibition \%} = [(A_{\text{DPPH\_control}} - A_{\text{DPPH\_sample}}) / A_{\text{DPPH\_control}}] \times 100 \quad (1)$$

**Table S1.** Radical scavenging activity (DPPH• test) of intestinal digesta of buffalo-milk dairy products.

Buffalo-milk dairy products <sup>#</sup>	EC <sub>50</sub> <sup>*</sup>	Equation	R <sup>2</sup>
Ricotta	1.91	$y = 6.6919x - 1.4372$	0.9975
Grana	2.13	$y = 6.037x - 0.9197$	0.9777
Yogurt	2.20	$y = 5.677x - 0.6423$	0.9816
Ice Cream	3.93	$y = 13.808x - 2.9734$	0.9972
Mozzarella	4.16	$y = 16.168x - 3.9204$	0.9927
Scamorza	4.26	$y = 11.460x - 1.4731$	0.9886

### References

García-Moreno, P.J.; Batista, I.; Pires, C.; Bandarra, N.M.; Espejo-Carpio, F.J.; Guadix, A.; Guadix, E.M. Antioxidant activity of protein hydrolysates obtained from discarded Mediterranean fish species. *Food Res Int.* **2014**, *65*, 469-476.