**Evaluation of the effect of inhibiting lipid oxidation of natural plant sources in a meat model system**

Sang-Keun Jina, Gap-Don Kimb,c,\*, Jin-Yeon Jeonga,\*

*aDepartment of Animal Resources Technology, Gyeongsang National University, Jinju, 52725, Republic of Korea*

*bGraduate School of International Agricultural Technology, Seoul National University, Pyeongchang 25354, Republic of Korea*

*cInstitutes of Green Bio Science & Technology, Seoul National University, Pyeongchang 25354, Republic of Korea*

\*Corresponding author: G.D. Kim, Tel. +82-33-339-5778, Fax. +82-33-339-5779, E-mail address: gapdonkim@snu.ac.kr; J.Y. Jeong, Tel. +82-55-751-3283, Fax. +82-55-751-3689, E-mail address: jinyeon.jeong2@gmail.com

Table S1. Natural sources used for antioxidant in meat and meat products

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| --- | --- | --- | --- | --- | --- | --- |
| Plant name | Scientific classification | Application forms | Meat systems | Phytochemicals | Functionalities | References |
| Noni | *Morinda citrifolia* | Puree | Beef patties |  | AntioxidantColor stability | Tapp et al., 2012 |
| JuicePowder |  | Total phenols | Free radical scavenging activity | Yang et al., 2007 |
| Celery | *Apium graveoens* | Extracts |  | Total phenolsApigeninLuteolinKaempferolCaffeic acidFerulic acid*p*-Coumaric acid | Free radical scavenging activity | Yao & Ren, 2011 |
| Powder | Emulsion-type sausage |  | Antioxidant | Jin et al., 2018 |
| Blackcurrant | *Ribes nigrum* | Dry matter |  | Total polyphenols | Antioxidant | Michalska et al., 2017 |
|  |  | Extracts |  | Polyphenols | Free radical scavenging activityFerric reducing ability | Teleszko & Wojdyło, 2015 |
| Extracts | Pork patties | AnthocyaninsFlavonols | Free radical scavenging activity | Jia et al., 2012 |
| Elderberry | *Sambucus latipinna* | JuiceWineExtractsPuree |  | AnthocyaninsFlavonolsPhenolic acids | AntioxidantHealth benefit | Sider et al., 2015 |
| Blueberry | *Vaccinium corymbosum* | Dried |  | Total phenolsAnthocyanins | Free radical scavenging activity | Martín-Gómez et al., 2020 |
| Aronia | *Aronia melanocarpa* | Extracts |  | Polyphenols | Free radical scavenging activityFerric reducing ability | Teleszko & Wojdyło, 2015 |
| Juice | Meat model system |  | Antioxidant | Burri et al., 2020 |
| Extracts |  | AnthocyaninsFlavonolsFlavan-3-olsHydroxycinnamic acidsChlorogenic acidNeochlorogenic acidProanthyocyanins | Antioxidant | Denev et al., 2012 |
| Lettuce | *Lactuca sativa* | FreshDried |  | PolyphenolsVitamin C | Free radical scavenging activityFerric reducing ability | Llorach et al., 2008 |
| Apple | *Malus domestica* | Extracts |  | Polyphenols | Free radical scavenging activityFerric reducing ability | Teleszko & Wojdyło, 2015 |
| Pomace powder | Ground meat |  | Antioxidant | Rather et al., 2015 |
| Thistle | *Silybum marianum* | Extracts |  | Total phenolsFlavonols | Free radical scavenging activity | Conforti et al., 2009 |
| Cinnamon | *Cinnamomum verum* | Powder | Ground meat |  | Antioxidant | Jayathilakan et al., 2007 |
| Essential oil | Fresh sausage |  | Antioxidant | Zhang et al. 2019 |
| Green tea | *Camellia sinensis* | Extracts | Ground meat | Catechin | Antioxidant | Tian et al., 2019 |
| Fermented |  | Total phenolsFlavonoids | Free radical scavenging activity | Cardoso et al., 2020 |
| Extract | Beef patty |  | Antioxidant | Bañón et al. 2007 |
| Ginger | *Zingiber officinale* | Eextract | Smoked buffalo meat |  | Antioxidant | Anandh et al. 2014. |
| Powder | Pork burgers |  | AntioxidantFree radical scavenging activity | Mancini et al., 2019 |
| Extract |  | Total Phenols | AntioxidantFerric reducing abilityFree radical scavengingactivity | Tohma et al., 2016 |
| Onion | *Allium cepa* | Juice | Cooked turkey breast |  | Antioxidant | Tang & Cronin. 2007 |
| Extracts |  | Total phenols | Free radical scavenging activity | Liguori et al., 2017 |
| Clove | *Syzygium aromaticum* | Powder | Pork sausage | Total phenolic compounds | Free radical scavenging activity | Jin et al., 2016 |
| Extracts |  | Total phenolic compoundsFlavonoids | Free radical scavenging activity | El-Maati et al. 2016 |
| Garlic | *Allium sativum* | Ground | Chicken sausage |  | Antioxidant | Sallam et al. 2004 |
| Extracts |  | Total compound | antioxidant | Chung et al. 2006 |
| Soybean | *Glycine max* | Extracts |  | Total phenolic compounds | Free radical scavenging activity | Petropoulos et al., 2018 |
| Paste |  | Total polyphenolsFlavonoids | Free radical scavenging activity | Yang et al., 2018a |
| Soy sauce | Marinated pork meat |  | Antioxidant | Yang et al., 2018b |
| Cherry berry | *Prunus avium* | Extracts | Sausage | Polyphenols | Antioxidant | Nowak et al., 2016 |
| Ginseng | *Panax ginseng* |  | Ground |  | Antioxidant | Yan et al., 2011 |
| Extracts |  | Polysaccharides | Free radical scavenging activity | Chen & Huang, 2019 |
| Extracts |  | Polysaccharides | Antioxidant | Kim et al., 2020 |
| Chili pepper | *Capsicum annuum* | Paste |  | Total polyphenolsflavonoids | Free radical scavenging activity | Yang et al.,2018a |
| Radish | *Raphanus raphanistrum* | Powder | Fermented cooked sausages |  | Antioxidant | Ozaki et al., 2020 |
| Extracts | Pork meat |  | Antioxidant | Jung et al., 2009 |
| Grape | *Vitis labrusca L.* | Extract | Raw and cooked chicken hamburger | Phenolics | TBARS | Selani et al. 2011 |
| Red wine |  | Anthocyanins | Free radical scavenging activity | Kharadze et al., 2018 |
| Red wine | Frankfurter-type sausage |  | Antioxidant | Feng et al., 2016 |

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