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

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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 |  | Antioxidant  Color stability | Tapp et al., 2012 |
| Juice  Powder |  | Total phenols | Free radical scavenging activity | Yang et al., 2007 |
| Celery | *Apium graveoens* | Extracts |  | Total phenols  Apigenin  Luteolin  Kaempferol  Caffeic acid  Ferulic 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 activity  Ferric reducing ability | Teleszko & Wojdyło, 2015 |
| Extracts | Pork patties | Anthocyanins  Flavonols | Free radical scavenging activity | Jia et al., 2012 |
| Elderberry | *Sambucus latipinna* | Juice  Wine  Extracts  Puree |  | Anthocyanins  Flavonols  Phenolic acids | Antioxidant  Health benefit | Sider et al., 2015 |
| Blueberry | *Vaccinium corymbosum* | Dried |  | Total phenols  Anthocyanins | Free radical scavenging activity | Martín-Gómez et al., 2020 |
| Aronia | *Aronia melanocarpa* | Extracts |  | Polyphenols | Free radical scavenging activity  Ferric reducing ability | Teleszko & Wojdyło, 2015 |
| Juice | Meat model system |  | Antioxidant | Burri et al., 2020 |
| Extracts |  | Anthocyanins  Flavonols  Flavan-3-ols  Hydroxycinnamic acids  Chlorogenic acid  Neochlorogenic acid  Proanthyocyanins | Antioxidant | Denev et al., 2012 |
| Lettuce | *Lactuca sativa* | Fresh  Dried |  | Polyphenols  Vitamin C | Free radical scavenging activity  Ferric reducing ability | Llorach et al., 2008 |
| Apple | *Malus domestica* | Extracts |  | Polyphenols | Free radical scavenging activity  Ferric reducing ability | Teleszko & Wojdyło, 2015 |
| Pomace powder | Ground meat |  | Antioxidant | Rather et al., 2015 |
| Thistle | *Silybum marianum* | Extracts |  | Total phenols  Flavonols | 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 phenols  Flavonoids | 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 |  | Antioxidant  Free radical scavenging activity | Mancini et al., 2019 |
| Extract |  | Total Phenols | Antioxidant  Ferric reducing ability  Free radical scavenging  activity | 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 compounds  Flavonoids | 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 polyphenols  Flavonoids | 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 polyphenols  flavonoids | 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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