## Supplementary Materials: Impact of Natural Juice Consumption on Plasma Antioxidant Status: A Systematic Review and Meta-Analysis

Fernanda S. Tonin, Laiza M. Steimbach, Astrid Wiens, Cássio M. Perlin and Roberto Pontarolo

<table>
<thead>
<tr>
<th>Reason for Exclusion</th>
<th>Number of Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of study or study design (e.g., reviews, trials without a control group or not randomized)</td>
<td>21</td>
</tr>
<tr>
<td>Type of intervention different from fruit or vegetables juice (e.g., capsules, plant extracts)</td>
<td>12</td>
</tr>
<tr>
<td>Outcome measures not related to oxidative stress or antioxidant capacity in human plasma</td>
<td>11</td>
</tr>
<tr>
<td>Impossibility of data collection</td>
<td>4</td>
</tr>
<tr>
<td>Population (e.g., athletes)</td>
<td>3</td>
</tr>
</tbody>
</table>
Table S2. Jadad Scale. Scores obtained for each study included in the systematic review.

<table>
<thead>
<tr>
<th>STUDY [Ref]</th>
<th>1. Was the Study Described as Randomized?</th>
<th>2. The Randomization Method was Described in the Paper, and that Method was Appropriate.</th>
<th>3. Was the Study Described as Double Blind?</th>
<th>4. The Method of Blinding was Described, and It was Appropriate.</th>
<th>5. Was there a Description of Withdrawals and Dropouts?</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amagase 2009</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>3</td>
</tr>
<tr>
<td>Brivida 2004</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>1</td>
</tr>
<tr>
<td>Bub 2003</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>1</td>
</tr>
<tr>
<td>Duthie 2006</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>2</td>
</tr>
<tr>
<td>Ellinger 2012</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>2</td>
</tr>
<tr>
<td>Garcia-A. 2012</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Ghavipour 2014</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>1</td>
</tr>
<tr>
<td>Guo 2008</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>1</td>
</tr>
<tr>
<td>Jacob 2008</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>4</td>
</tr>
<tr>
<td>Khan 2014</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>3</td>
</tr>
<tr>
<td>Kuntz 2014</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>3</td>
</tr>
<tr>
<td>Lynn 2012</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>1</td>
</tr>
<tr>
<td>Mathison 2014</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>3</td>
</tr>
<tr>
<td>Parashar 2011</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>1</td>
</tr>
<tr>
<td>Park 2009</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>2</td>
</tr>
<tr>
<td>Pourhamdi, 2015</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>4</td>
</tr>
<tr>
<td>Soriano-M. 2014</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Butalla 2012</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Basu 2011</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Castilla 2006</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Castilla 2008</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Guo 2014</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>3</td>
</tr>
<tr>
<td>Karlsen 2010</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
<tr>
<td>Lee 2011</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>1</td>
</tr>
<tr>
<td>Sabitha 2009</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NOT MENTIONED</td>
<td>2</td>
</tr>
<tr>
<td>Shema-Didi 2012</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>4</td>
</tr>
<tr>
<td>Sohrab 2015</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>3</td>
</tr>
<tr>
<td>Uprichart 2000</td>
<td>YES</td>
<td>NOT MENTIONED</td>
<td>NO</td>
<td>NOT MENTIONED</td>
<td>YES</td>
<td>2</td>
</tr>
</tbody>
</table>
Figure S1 Risk of bias graph of all included studies according to the Cochrane Collaboration.
Figure S2. Risk of bias summary of all included studies.
Appendix 1—List of Excluded Studies [1–51]


5. Aptekmann, N.P.; Cesar, T.B. Orange juice improved lipid profile and blood lactate of overweight middle-aged women subjected to aerobic training. *Maturitas* 2010, 67, 343–347.


19. Inoue, T.; Komoda, H.; Uchida, T.; Node, K. Tropical fruit camu-camu (myrciaria dubia) has anti-
Schauss, A.G. *In vitro* and *in vivo* antioxidant and anti-inflammatory capacities of an antioxidant-rich fruit
and berry juice blend. Results of a pilot and randomized, double-blinded, placebo-controlled, crossover
22. Johnston, C.S.; Dancho, C.L.; Strong, G.M. Orange juice ingestion and supplemental vitamin C are equally
polyphenol-rich chokeberry juice on antioxidant/pro-oxidant status in healthy subjects. *J. Med. Food* 2014,
17, 869–874.
24. Kiefert, I.; Prock, P.; Lawrence, C.; Wise, J.; Bieger, W.; Bayer, P.; Rathmanner, T.; Kunze, M.; Rieder, A.
Supplementation with mixed fruit and vegetable juice concentrates increased serum antioxidants and
a flavonoid-rich juice on inflammation, oxidative stress, and immunity in elite swimmers: A
juice supplement on arterial stiffness and inflammation in healthy adults: A randomised controlled trial.
27. Mackinnon, E.S.; Rao, A.V.; Josse, R.G.; Rao, L.G. Supplementation with the antioxidant lycopene
significantly decreases oxidative stress parameters and the bone resorption marker n-telopeptide of type i
Ayaori, M.; Inakuma, T.; et al. Effects of tomato juice consumption on plasma and lipoprotein carotenoid
Vitaminol. (Tokyo)* 2001, 47, 213–221.
29. Miglio, C.; Peluso, I.; Raguzzini, A.; Villaño, D.V.; Cesqui, E.; Catasta, G.; Toti, E.; Serafini, M. Fruit juice
as affected by intervention with a multicomponent beverage rich in vitamin C and vitamin E. *Ernährung
Effects of elderberry juice on fasting and postprandial serum lipids and low-density lipoprotein oxidation
244–249.
32. O’Byrne, D.J.; Devaraj, S.; Grundy, S.M.; Jialal, I. Comparison of the antioxidant effects of concord grape
76, 1367–1374.
and cranberry juice consumption on the plasma antioxidant capacity of healthy female volunteers. *Eur. J.
34. Peluso, I.; Villano, D.V.; Roberts, S.A.; Cesqui, E.; Raguzzini, A.; Borges, G.; Crozier, A.; Catasta, G.; Toti,
E.; Serafini, M. Consumption of mixed fruit-juice drink and vitamin C reduces postprandial stress induced
35. Pilaczynska-Szczeniak, L.; Skarpanska-Steinborn, A.; Des kur, E.; Basta, P.; Horoszkiewicz-Hassan, M.
The influence of chokeberry juice supplementation on the reduction of oxidative stress resulting from an
Caporossi, D. Exercise-induced oxidative stress in elderly subjects: The effect of red orange supplementation
on the biochemical and cellular response to a single bout of intense physical activity. *Free Radic. Res.* 2013,
47, 202–211.


