**Supplementary table 1:** The lutein content of vegetables and fruits. (μg /100g edible portion)

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| Vegetables |
| Number | **Name** | **Lutein content** |
| 1 | Kale | 39550 |
| 2 | Leeks (bulb and lower leaf-portion) | 18226.9 |
| 3 | Amaranth leave | 15000 |
| 4 | Amaranth | 14449.6 |
| 5 | Chestnut pumpkin | 13265.2 |
| 6 | Chinese celery leaf | 12922.6 |
| 7 | Cress, garden | 12500 |
| 8 | Spinach | 12198 |
| 9 | Parsley | 11434.1 |
| 10 | Chicory, greens | 10300 |
| 11 | Chicory leaf | 10300 |
| 12 | Mustard green | 9900 |
| 13 | Collard | 8932 |
| 14 | Pakchoi, petiole | 6699.5 |
| 15 | Water spinach | 5323.2 |
| 16 | Fennel  | 4658.1 |
| 17 | Mustard greens | 3548.9 |
| 18 | Broccoli  | 3507.2 |
| 19 | Seedling, Pea | 3212.8 |
| 20 | Carrot, dehydrated | 2870 |
| 21 | Lettuce Romaine | 2544.4 |
| 22 | Peas, green | 2447 |
| 23 | Lettuce, cos or romaine | 2312 |
| 24 | Lettuce Endive | 2211.7 |
| 25 | Squash, summer, all varieties | 2125 |
| 26 | Grape leaves | 1747 |
| 27 | Lettuce, green leaf | 1730 |
| 28 | Rape | 1656 |
| 29 | Cabbage, green | 1627.8 |
| 30 | Brussels sprouts | 1590 |
| 31 | Cucumber | 1585.1 |
| 32 | Asparagus stem | 1430.4 |
| 33 | Broccoli | 1403 |
| 34 | Lettuce, butter- head | 1223 |
| 35 | Sugar bean, with husk | 1196.6 |
| 36 | Green Soya bean, without husk | 1147.9 |
| 37 | Onion, spring (includes tops and bulb)  | 1137 |
| 39 | Mini Chinese Cabbage | 1036.9 |
| 40 | green pepper | 886.5 |
| 41 | Color pepper | 878.6 |
| 42 | Cowpea, common, with husk | 874.5 |
| 43 | Kidney bean, long, with husk  | 817.6 |
| 44 | Carrot | 806.1 |
| 45 | bitter gourd | 790.1 |
| 46 | Corn, sweet, yellow | 764 |
| 47 | Pea, edible-podded | 740 |
| 48 | Hyacinth bean, green, with husk | 724.9 |
| 49 | Asparagus | 710 |
| 50 | Pepper, hot chili, red | 709 |
| Fruits |
| Number | **Name** | **Lutein content** |
| 1 | Cherry tomato, red | 364 |
| 2 | The giant peak grapes | 200.3 |
| 3 | banana | 167.2 |
| 4 | Tangerine (mandarin oranges) | 138 |
| 5 | Nectarine | 130 |
| 6 | Orange, all commercial varieties | 129 |
| Orange, navels |
| Kumquats |
| 7 | Kiwi fruit (Chinese gooseberries), fresh | 122 |
| 8 | Red grape | 96.5 |
| 9 | Peach | 91 |
| 10 | Cranberry, raw | 91 |