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Virginia Opossum Nutrition Basics: Vegetables and Fruits

This is a brief excerpt from a complete opossum diet plan and nutritional guide. This document is provided for rehabbers as a “cheat sheet” when choosing vegetables and fruits for their opossums.

Opossums are omnivorous, resourceful, and will eat very different things from region to region based on what is locally available. They do best on a diverse diet approximating what they would find in their natural habitats. Moderation and variety are crucial. Too much of any one item, even a nutritionally balanced one, can be disadvantageous. An unbalanced diet can cause metabolic bone disease (MBD) and other avoidable disorders. Rehabilitators must be mindful of calcium-to-phosphorus ratios (Ca:P) and other dietary factors which could cause MBD. A 1.5-to-1 calcium-to-phosphorus ratio is thought to be ideal for avoiding MBD. This ratio can vary from part to part within the same food item.

Note also that excessively high amounts of Vitamin A are thought to cause MBD. While there is no known “maximum Vitamin A amount” for opossums, caution is advised with vegetables high in Vitamin A. For example, 1/8 cup per week of carrots for an adult opossum who likes them should cause no issues, while ¼ cup daily would be inadvisable. Again, variety and moderation are crucial.

Be conservative with fruit portion sizes. The information below is for raw fruit, not canned and sugared or with other modifications.

Buying organic is recommended whenever possible to minimize exposure to pesticides and other toxins. Buying non-GMO (not genetically modified) is also recommended to avoid incurring unknown secondary effects and to avoid any unknown deviations from the standard ratios indicated on the following pages.

Vegetables, in order of decreasing Ca:P ratio:

Pak Choi (often called “**Bok Choy**”)

Ca:P Ratio: 3:1

Vitamin A: Moderate

Notes: Can correct unbalanced Ca:P ratios in opossums who were calcium deficient. One of few vegetables with such a high calcium-to-phosphorus ratio. Low in calories. Usually enjoyed even by opossums who resist eating vegetables. The crunchiness can be appealing to them, as well. Do not overfeed due to Vitamin A content.

Verdict: Excellent choice.

Cabbage

Ca:P Ratio: 1.5:1

Vitamin A: Moderate.

Notes: Safe.

Verdict: Excellent choice. Ideal calcium-to-phosphorus ratio for opossums.

Celery

Ca:P Ratio: 1.3:1

Vitamin A: In good balance.

Notes: Ultra-low calorie. Good calcium-to-phosphorus ratio. Opossums usually won't eat in amounts large enough to be unsafe.

Verdict: Excellent choice.

Fennel (sometimes sold as “**Anise**”)

Ca:P Ratio: 1:1

Vitamin A: Low.

Notes: Safe.

Verdict: Good choice.

String Beans

Ca:P Ratio: 1:1

Vitamin A: Moderate

Notes: Many opossums who normally resist vegetables seem to like the crunch.

Verdict: Good occasional snack choice.

Carrots

Ca:P Ratio: 1:1

Vitamin A: Very high. Important not to overfeed.

Notes: Fair calcium-to-phosphorus ratio but very high in Vitamin A.

Verdict: Use sparingly.

Kale

Ca:P Ratio: 1:1

Vitamin A: Substantial. Important not to overdo.

Notes: Often used in smoothies for opossums.

Verdict: Good occasional snack choice.

Broccoli

Ca:P Ratio: 1:1 on average but depends on part of plant: Rabi = 1.5:1 (excellent). Stems, stalks, florets = 1:1.5 (not nearly as good for opossums).

Vitamin A: Significant amount, though harder to overdo than carrots and kale.

Notes: Which part of the broccoli plant is used is important since ratios vary by part.

Verdict: Good occasional snack choice. Rabi is best.

Cauliflower

Ca:P Ratio: 1:2

Vitamin A: Low.

Notes: Low calorie.

Verdict: Good occasional snack choice in moderate amounts.

Bell Peppers (green... see notes below)

Ca:P Ratio: 1:2

Vitamin A: Moderate.

Notes: Color of bell peppers makes a big difference. Red bell peppers have 10 times more Vitamin A than green and have a lower Ca:P ratio of 1:4 (so, not as good on either count for opossums). Green peppers are the best choice for opossums.

Verdict: Good occasional snack choice in moderate amounts.

Brussels Sprouts

Ca:P Ratio: 1:2

Vitamin A: Moderate to high.

Notes: Favored by some opossums who do not like other vegetables.

Verdict: Good occasional snack choice in moderate amounts.

Cucumber

Ca:P Ratio: 1:2

Vitamin A: Low.

Notes: Low calories.

Verdict: Good occasional snack choice in moderate amounts.

Mushrooms

Ca:P Ratio: approximately 1:30

Vitamin A: Usually none.

Notes: Very problematic calcium-to-phosphorus ratio for opossums but can be a good way to partially address other deficiencies depending on type of mushroom.

Verdict: Fair occasional snack choice in small amounts.

Fruits (and drupes), in order of decreasing Ca:P ratio:

Pineapple

Ca:P Ratio: 1.7:1

Vitamin A: Moderate.

Notes: Good calcium-to-phosphorus ratio for opossums.

Verdict: Very good snack choice in moderation despite not being in Virginia opossums' natural environment.

Blackberry

Ca:P Ratio: 1.3:1

Vitamin A: High.

Notes: Good calcium-to-phosphorus ratio for opossums.

Verdict: Very good snack choice in moderation.

Kiwi

Ca:P Ratio: 1:1

Vitamin A: Moderate.

Notes: Fair calcium-to-phosphorus ratio for opossums.

Verdict: Very good snack choice in moderation despite not being in opossums' natural environment.

Cherry

Ca:P Ratio: 1:1

Vitamin A: Very high.

Notes: Fair calcium-to-phosphorus ratio for opossums but very high in Vitamin A.

Verdict: Good snack choice in small amounts.

Raspberry

Ca:P Ratio: 1:1.2

Vitamin A: Low.

Notes: Suboptimal calcium-to-phosphorus ratio for opossums.

Verdict: Good snack choice in moderation.

Pear

Ca:P Ratio: 1:1.2

Vitamin A: Low.

Notes: Suboptimal calcium-to-phosphorus ratio for opossums.

Verdict: Good snack choice in moderation.

Winter Squash (various types)

Ca:P Ratio: 1:1.5

Vitamin A: Low.

Notes: Better than summer squash varieties for opossums.

Verdict: Good occasional snack choice in moderate amounts.

Cranberry

Ca:P Ratio: 1:1.5

Vitamin A: Moderate.

Notes: Data here is for raw cranberries. Good when used raw and blended into smoothies. Some data suggests the juice can prevent UTIs (urinary tract infections).

Verdict: Good occasional snack choice. Calcium and phosphorus are both low, so while the ratio is not optimal, it is unlikely to be problematic in reasonable quantities.

Strawberry

Ca:P Ratio: 1:1.5

Vitamin A: Low.

Notes: Calcium-to-phosphorus ratio is not favorable for opossums but is better than many other fruits.

Verdict: Good occasional snack choice in small amounts.

Watermelon

Ca:P Ratio: 1:1.5

Vitamin A: Very high.

Notes: Very high in sugar.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio, Vitamin A content, and sugar content.

Cantaloupe/Honeydew/various melons

Ca:P Ratio: 1:1.5 to 1:2

Vitamin A: Usually extremely high.

Notes: Exceedingly high Vitamin A content. Use with care.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio, Vitamin A content, and sugar content.

Apple

Ca:P Ratio: 1:2

Vitamin A: Moderate.

Notes: Pears have better calcium-to-phosphorus ratios.

Verdict: Fair snack choice in small amounts.

Blueberry

Ca:P Ratio: 1:2

Vitamin A: Moderate.

Notes: There are two basic kinds readily available, “North Carolina” types (bigger, like small grapes in size) and “wild” or “Maine” varieties (tiny, like capers... Wyman’s of Maine is a popular brand). These tend to be favorites of younger joeys and jills.

Verdict: Fair snack choice in small amounts.

Grape

Ca:P Ratio: 1:2

Vitamin A: Moderate.

Notes: Not much variation from type to type in terms of ratios and vitamins important to Virginia opossums.

Verdict: Fair occasional snack choice in small amounts.

Summer Squash (various types, including **Zucchini**)

Ca:P Ratio: 1:2.5 – 1:3

Vitamin A: Moderate.

Notes: Less desirable than winter squash varieties for opossums.

Verdict: Good occasional snack choice in small amounts.

Tomato

Ca:P Ratio: 1:2 (red and green) to 1:6 (orange)

Vitamin A: Very high and variable.

Notes: The color of the tomato is important, since the calcium-to-phosphorus ratio changes drastically.

Red and green have better ratios than yellow and orange.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio and Vitamin A content.

Peach

Ca:P Ratio: 1:3.5

Vitamin A: High.

Notes: Unfavorable calcium-to-phosphorus ratio for opossums. Better than nectarines.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio and Vitamin A content.

Nectarine

Ca:P Ratio: 1:4

Vitamin A: High.

Notes: Unfavorable calcium-to-phosphorus ratio for opossums.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio and Vitamin A content.

Avocado

Ca:P Ratio: 1:4

Vitamin A: Moderate.

Notes: Unfavorable calcium-to-phosphorus ratio for opossums.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio.

Banana

Ca:P Ratio: 1:5

Vitamin A: Moderate.

Notes: Unfavorable calcium-to-phosphorus ratio for opossums.

Verdict: Use only in small amounts as a special treat due to calcium-to-phosphorus ratio.

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