

Fruits and Vegetables Nutritional Guide for Your Pet Reptile! (A.K.A. The Grocery Shopping Guide for Your Reptile!)

Many species of pet reptiles in captivity are herbivorous to omnivorous, and require the proper diets, and nutritional supplementation and ratios, in order to remain happy and healthy throughout their lives in order to thrive. Many species of lizards, such as iguanas, bearded dragons, uromastyx, and other lizards, as well as many chelonians (i.e. turtles and tortoises) will consume a variety of different fruits and vegetables readily as all, or portions, of their overall diets. There are many different types of fruits and vegetables which are available at one's local grocery store, supermarket, or other sources which can, and should be incorporated into a healthy diet for these reptiles.

However, some types of fruits and vegetables are better and more nutritional than others for your pet reptile, and it is always helpful to know which types to choose for your reptile that are the healthiest and most suitable. These are the reasons why this reference guide will hopefully serve as a useful and practical resource for choosing the best fruits and vegetables for your reptile! There are several nutritional components to look for and compare that one should become aware of. **Ca:P** refers to the ratio of calcium to phosphorous in the food item, and in order to provide a properly balanced diet, this Ca:P ratio must be taken into account as high or imbalanced levels of these ratios can lead to an inability to convert calcium, among other health problems.

Many calcium supplements and multi-vitamins that are commercially available contain **Vitamin D3**, which is essential to calcium metabolism, and is developed in your reptile's skin from contact with sufficient UVB wavelengths. Other nutritional components to be aware of, and compare include the percentages or ratios of **Proteins**, **Fats**, **Fibers**, **Sugars**, and **Water**. Some types of fruits and vegetables tend to carry less nutritional value due to their high percentage of water and low percentage of other nutrients, or contains high levels of **Oxalic Acid**, or Oxalates, which bind and remove calcium from these foods.

It is also important to consider, that freezing many types of fruits and vegetables may also oftentimes cause nutrients such as **Thiamine** (or Vitamin B1) to become lost and thereby reducing their nutritional

value. When these frozen leafy greens or other vegetables are fed over a long period of time, and no supplementations are made to add this Thiamine back into their proper diets, Hypothiaminosis, and other nutritional disorders can likely occur. More information can be found on the USDA Food Nutrient Database, https://fdc.nal.usda.gov/ as well as the Beautiful Dragons Reptile Rescue website: http://www.beautifuldragons.com/Nutrition.html

Without further a-due, here is a guide for the most recommended, staple fruits and vegetables, and their nutritional ratios and percentages which should be included in many species of pet reptile's diets, as well as which types may be suitable once in awhile with moderation, and which ones should usually be avoided. In general, unlike many leafy greens, which should generally make up the staple of many herbivorous to omnivorous reptile's diets, most other non-leafy green fruits and vegetables mentioned here should be given more sparingly and occasionally, as treats, or be offered as part of a more varied diet, rather than as staples to their day to day diets.

It should also be noted that each animal may be an individual, and may prefer or dislike some of these foods over others. Trying variety is key in finding out what your individual animal may like most. For this section, we will be focusing on the (oftentimes) seed-or-pod-bearing, fleshy edible, or otherwise edible portions or capsules of many types of fruits and vegetables other than leafy greens or their tops, which can be found separately in "The Leafy Greens Nutritional Guide for Your Pet Reptile!" And finally, always be sure to finely chop, or cut up any fruits or vegetables given in order to best ensure that your reptile will be able to ingest them.

<u>A</u>



Apples (Sliced/Peeled, All Types/Generally):

*Yes, but Best in Moderation; Ratios may vary depending on the type.

Ca:P: 1:1.8 Protein: 0.2% Fat: 0.3% Fiber: 1.9% Water: 85%



Apricots:

*Yes, but Best in Moderation

Ca:P: 1:1.4 Protein: 1.4% Fat: 0.4% Fiber: 2.4% Water: 86%



Artichokes (Hearts); No Data Available on Leaves

*Yes, but Best in Moderation

Ca:P: 1:2 Protein: 3.2% Fat: 0.2% Fiber: 5.4% Water: 85%



Asparagus:

*Yes, but Best in Moderation

Ca:P: 1:2.7 Protein: 2.3% Fat: 0.2% Fiber: 2.1% Water: 92%



<u>Avocados:</u>

*No, Generally Avoid

Ca:P: 1:4 Protein: 2.1% Fat: 17.3% Fiber: 4.9% Water: 73%

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Bananas:

*Yes, but Best in Moderation

Ca:P: 1:3.3 Protein: 1.0% Fat: 0.5% Fiber: 2.4% Water: 74%



Beets (Fruit)

*Yes, but Best in Moderation

No Data Available.



Bell Peppers (Green, Yellow, and Red):

*Yes, but Best in Moderation

Ca:P: 1:2 (Green), 1:2 (Red), 1:2.2 (Yellow)

Protein: 0.9% (Green), 0.9% (Red), 1.0% (Yellow)

Fat: 0.2% (Green, Red, and Yellow)

Fiber: 1.8% (Green), 2.0% (Red), 0.9% (Yellow)

Water: 92% (Green, Red, and Yellow)



Blackberries:

*Yes, but Best in Moderation

Ca:P: 1:5.1 Protein: 0.7% Fat: 0.4% Fiber: 5.3% Water: 86%



Blueberries:

*Yes, but Best in Moderation

Ca:P: 1:1.6 Protein: 0.7% Fat: 0.4% Fiber: 2.7% Water: 85%



Broccoli:

*Yes, but Best in Moderation

Ca:P: 1:1.4 Protein: 3.0% Fat: 0.4% Fiber: 3.0% Water: 91%

<u>C</u>





*Canned Fruits And Vegetables:

*No, Generally Avoid; Can Often Have Additives, Preservatives, Pesticides, or Fertilizer Residues.



Cantaloupe:

*Yes, but Best in Moderation

Ca:P: 1:1.5 Protein: 0.9% Fat: 0.3% Fiber: 0.8% Water: 90%



Carrots (Roots):

*Yes, but Best in Moderation

Ca:P: 1:1.7 Protein: 0.8% Fat: 0.5% Fiber: 1.8% Water: 90%



Cauliflower:

*Yes, but Best in Moderation

Ca:P: 1:2 Protein: 2.0% Fat: 0.2% Fiber: 2.5% Water: 92%



Celery (Stalk and Leaves):

*Yes, but Best in Moderation and Never as a Staple

Ca:P: 1:6.1 Protein: 0.8% Fat: 0.1% Fiber: 1.7% Water: 95%



Cherries:

*Yes, but Best in Moderation

Ca:P: 1:1.6 Protein: 1.1% Fat: 0.2% Fiber: 2.1% Water: 82%



Coconuts:

*No, Generally Avoid.



Corn; Baby:

*Yes, but Best in Moderation

Data Not Available.



Corn; Sweet/Yellow, Maize, Field:

*Yes, but Best in Moderation

Ca:P: 1:13 Protein: 2.6% Fat: 1.0% Fiber: 2.0% Water: 77%



Cranberries:

*Yes, but Best in Moderation

Ca:P: 1:1.3 Protein: 0.4% Fat: 0.2% Fiber: 4.2% Water: 87%



Cucumber:

*Yes, but Best in Moderation; Low Nutritional Value

Ca:P: 1:4.4 (Zucchini), 1:1.5 (Cucumber)
Protein: 2.7% (Zucchini), 0.6% (Cucumber)
Fat: 0.4% (Zucchini), 0.2% (Cucumber)
Fiber: 1.1% (Zucchini), 0.7% (Cucumber)
Water: 93% (Zucchini), 97% (Cucumber)



Currant Berries:

*Yes, but Best in Moderation

Data Not Available.

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Dragonfruit:

*Yes, but Best in Moderation

Ca:P: Data Not Avalable

Protein: 1.2% Fat: 0% Fiber: 3.0%

Water: Data Not Available



Eggplant:

*Yes, but Best in Moderation

Ca:P: 1:3 Protein: 1.0% Fat: 0.2% Fiber: 2.5% Water: 92%

<u>F</u>



<u>Figs:</u>

*Yes, but Best in Moderation

Ca:P: 2:5.1 Protein: 0.8% Fat: 0.3% Fiber: 3.3% Water: 79%





*Frozen Fruits And Vegetables:

*No, Generally Avoid; Can Often Have Additives, Preservatives, Pesticides, or Fertilizer Residues. Less Nutritional Value.

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Garlics:

*No, Generally Avoid; Potentially Toxic to Reptiles.



Ginger Root:

*No, Generally Avoid; Potentially Toxic to Reptiles



Gourds:

*Yes/No. Depending on the type. If they are human edible, then probably OK.



Grapes (All Types in General):

*Yes, but Best in Moderation

Ca:P: 1:4.1 Protein: 0.6% Fat: 0.4% Fiber: 1.0% Water: 81%



Grapefruit:

*Yes, but Best in Moderation

Ca:P: 1:2.1 Protein: 0.6% Fat: 0.1% Fiber: 0% Water: 91%



Green Beans:

*Yes, Recommended Staple.

Ca:P: 1:1 Protein: 1.8% Fat: 0.1% Fiber: 3.4% Water: 90%

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Honeydew:

*Yes, but Best in Moderation

Ca:P: 1:1.7 Protein: 0.5% Fat: 0.1% Fiber: 0.6% Water: 90%



"Hot" Peppers (Poblano, Cubanelle, Serrano, Banana, Habaenero, Jalapeno, etc.):

*No, Uncertain or Generally Avoid; Avoid or Use Cautiously To Be Safest.

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Indian or Flint Corn:

*Unknown Data. Probably OK on Occasion.

J

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Kiwi Fruits:

*Yes, but Best in Moderation

Ca:P: 1:1.5 Protein: 1.0% Fat: 0.4% Fiber: 3.4% Water: 83%



<u>Kohrabi:</u>

*Yes, but Best in Moderation

Ca:P: 1:2 Protein: 1.7% Fat: 0.1% Fiber: 3.6% Water: 91%

<u>L</u>



Leeks:

*No, Generally Avoid; Potentially Toxic to Reptiles.



Lemons:

*No, Generally Avoid; High Citrus Fruits



Lima Beans:

*Yes, but Best in Moderation

Data Not Available.



Limes:

*No, Generally Avoid; High Citrus Fruits.

M



Mangoes:

*Yes, but Best in Moderation

Ca:P: 1:1 Protein: 0.5% Fat: 0.3% Fiber: 1.8% Water: 82%



Mulberries (All Types):

*Yes, but Best in Moderation; Can Also Eat the Leves.

Data Not Available.



Mushrooms, Other Than Portabellas and Whites:

*No, Generally Avoid; Use Considerable Caution. Can Be Toxic, Especially if Not Properly Identified Or Of Uncertain Origin.



**Mushrooms (Portabella and White Only):

*Yes/No, Depending on Species. Best in Moderation; **Can Depend on the Group of Reptiles; Lizards Generally No. Some Turtles and Tortoises are OK. Use Considerable Caution With Any Other Mushrooms Than Portabella or Whites).

Ca:P: 1:16.3 Protein: 2.5% Fat: 0.2% Fiber: 1.5% Water: 91%

Ν



Nuts, Any Types (Pecans, Almonds, Brazil Nuts, Cashews, Macadamias, Pistachios, Walnuts, Peanuts):

*No, Generally Avoid. High in Fats and Unsuitable Ca:P Ratios.

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Okra:

*Yes, but Best in Moderation.

Ca:P: 1.3:1 Protein: 2.0% Fat: 0.1% Fiber: 3.2% Water: 90%



Onions (All Types):

*No, Generally Avoid; Potentially Toxic to Reptiles



Oranges; Mandarin:

*No, Generally Avoid; High Citrus Fruits

Ca:P: 1:4.1 Protein: 0.6% Fat: 0.2% Fiber: 2.3% Water: 88%



Oranges; Navel:

*No, Generally Avoid; High Citrus Fruits

Ca:P: 2:1 Protein: 1.0% Fat: 0.1% Fiber: 2.4% Water: 87%

<u>P</u>



Papaya:

*Yes, Recommended Staple.

Ca:P: 5:1 Protein: 0.6% Fat: 0.1% Fiber: 1.8% Water: 89%



Parsnip:

*Yes, but Best in Moderation

Ca:P: 1:2 Protein: 1.2% Fat: 0.3% Fiber: 4.9% Water: 80%



Passionfruit:

*Yes, but Best in Moderation

Data Not Available.



Peaches:

*Yes, but Best in Moderation

Ca:P: 1:2.4 Protein: 0.7% Fat: 0.1% Fiber: 2.0% Water: 88%



Pears:

*Yes, but Best in Moderation

Ca:P: 1:1 Protein: 0.4% Fat: 0.4% Fiber: 2.4% Water: 84%



Peas, Green (Peas and Pods):

*Yes, but Best in Moderation

Ca:P: 1:4.3 Protein: 5.4% Fat: 0.4% Fiber: 5.1% Water: 79%



Peas, Snap (Peas and Pods):

*Yes, but Best in Moderation

Ca:P: 1:1.2 Protein: 2.8% Fat: 0.2% Fiber: 2.6% Water: 89%



Pickles:

No, no foods with preservatives.



Pineapple:

*Yes, but Best in Moderation

Ca:P: 1:1 Protein: 0.4% Fat: 0.1% Fiber: 0.8% Water: 86%



Plaintains:

*Yes, but Best in Moderation

Data Unknown.



Plums:

*Yes, but Best in Moderation

Ca:P: 1:2.5 Protein: 0.8% Fat: 0.6% Fiber: 1.5% Water: 85%





Potatoes; Russet, Yellow, Idaho, Red

*Yes, but Best in Moderation

Ca:P: 1:5 Protein: 1.7% Fat: 0.1% Fiber: 1.8% Water: 77%



Potatoes, Sweet:

*Yes, but Best in Moderation

Ca:P: 1:3.2 Protein: 1.5% Fat: 0.2% Fiber: 4.1% Water: 70%



Prunes:

*Yes, but Best in Moderation

Fresh Data Not Available.



Pumpkins:

*Yes, but Best in Moderation

Ca:P: 1:2 Protein: 1.0% Fat: 0.1% Fiber: 0.5% Water: 92%

Q

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Radishes:

*Yes, but Best in Moderation

Ca:P: 1:1 Protein: 0.6% Fat: 0.5% Fiber: 1.6% Water: 95%



Raisins:

*Yes, but Best in Moderation

Ca:P: 1:2 Protein: 3.2% Fat: 0.5% Fiber: 4.0% Water: 15%



Raspberries:

*Yes, but Best in Moderation

Ca:P: 1:1.2 Protein: 0.9% Fat: 0.6% Fiber: 6.8% Water: 87%



<u>Rhubarb:</u>

*No, Generally Avoid; Highly Toxic to Reptiles!

Ca:P: 6:1 Protein: 0.9% Fat: 0.2% Fiber: 1.8% Water: 94%



Rutabegas:

*Yes, but Best in Moderation

Ca:P: 1:1.2 Protein: 1.2% Fat: 0.2% Fiber: 2.5% Water: 90%

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Seeds, Any Types:

*No, Generally Avoid. High in Fats and Unsuitable Ca:P Ratios.



Sprouts, Bean:

*Yes, Recommended Staple

Data Not Available.



Starfruit:

*Yes, but Best in Moderation

Ca:P: 1:4 Protein: 0.5% Fat: 0.4% Fiber: 2.7% Water: 91%



Squashes; All Types-Acorn, Butternut/Winter, Hubbard, Scallop, Spaghetti, Summer

*Yes, Recommended Staples.

Ca:P: 1:1 (Acorn), 1.5:1 (Butternut/Winter), 1:1.5 (Hubbard), 1:2 (Scallop), 2:1 (Spaghetti), 1:1.8 (Summer)

Protein: 0.8% (Acorn), 1.0% (Butternut/Winter), 2.0% (Hubbard), 1.2% (Scallop), 0.6% (Spaghetti), 1.2% (Summer)

Fat: 0.1% (Acorn), 0.1% (Butternut/Winter), 0.5% (Hubbard), 0.2% (Scallop), 0.6% (Spaghetti), 0.2% (Summer)

Fiber: 1.5% (Acorn), 11.7% (Butternut/Winter), 8.7% (Hubbard), 3.8% (Scallop), 6.9% (Spaghetti), 1.9% (Summer)

Water: 88% (Acorn), 86% (Butternut/Winter), 88% (Hubbard), 94% (Scallop), 92% (Spaghetti), 94%

(Summer)



Strawberries:

*Yes, but Best in Moderation

Ca:P: 1:1.4 Protein: 0.6% Fat: 0.4% Fiber: 2.3% Water: 92%

<u>T</u>



Tomatoes:

*Yes, but Best in Moderation

Ca:P: 1:5 Protein: 0.9% Fat: 0.3% Fiber: 1.1% Water: 94%



Turnips (Bulbs):

*Yes, but Best in Moderation

Ca:P: 1:1 Protein: 0.9% Fat: 0.1% Fiber: 1.8% Water: 92%

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Water Chestnuts:

*No, Can Eat, But Generally Avoid

Data Not Available.



Watermelon:

*Yes, but Best in Moderation

Ca:P: 1:1 Protein: 0.6% Fat: 0.4% Fiber: 0.5% Water: 92%

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<u>Y</u>



Yams:

*Yes, but Best in Moderation

Ca:P: 1:3.2 Protein: 1.5% Fat: 0.2% Fiber: 4.1% Water: 70%



Zucchini :

*Yes, but Best in Moderation; Low Nutritional Value

Ca:P: 1:4.4 (Zucchini), 1:1.5 (Cucumber) Protein: 2.7% (Zucchini), 0.6% (Cucumber) Fat: 0.4% (Zucchini), 0.2% (Cucumber) Fiber: 1.1% (Zucchini), 0.7% (Cucumber) Water: 93% (Zucchini), 97% (Cucumber)