

## Why Chose Chia Over Flax?

| Nutrient                       | Units | flax  | chia  |
|--------------------------------|-------|-------|-------|
|                                |       |       |       |
| Water                          | g     | 8.75  | 4.90  |
| Energy                         | kcal  | 492   | 525   |
| Energy                         | kj    | 2059  | 2194  |
| Protein                        | g     | 19.50 | 20.70 |
| Total lipid (fat)              | g     | 34.00 | 30.75 |
| Carbohydrate, by difference    | g     | 34.25 | 43.85 |
| Fibre, total dietary           | g     | 27.9  | 33.7  |
| Minerals                       |       |       |       |
| Calcium, Ca                    | mg    | 199   | 631   |
| Iron, Fe                       | mg    | 6.22  | 6.50  |
| Magnesium, Mg                  | mg    | 362   | 466   |
| Phosphorus, P                  | mg    | 498   | 948   |
| Potassium, K                   | mg    | 681   | 160   |
| Sodium, Na                     | mg    | 34.0  | 19.0  |
| Zinc, Zn                       | mg    | 4.17  | 3.49  |
| Copper, Cu                     | mg    | 1.041 | 0.188 |
| Selenium, Se                   | mcg   | 5.5   | 55.0  |
| Vitamins                       |       |       |       |
| Vitamin C, total ascorbic acid | mg    | 1.3   | <1.0  |
| Thiamin                        | mg    | 0.170 | 0.620 |
| Riboflavin                     | mg    | 0.160 | 0.170 |
| Niacin                         | mg    | 1.400 | 8.830 |
| Vitamin B-6                    | mg    | 0.927 | 0.10  |
| Folate, total                  | mcg   | 278   | 48.53 |



| Amino Acids (as grams/100 gm protein) |          |     |
|---------------------------------------|----------|-----|
|                                       |          |     |
| Arginine                              | gm/100gm | 9.9 |
| Histidine                             | gm/100gm | 2.6 |
| Isoleucine                            | gm/100gm | 3.2 |
| Leucine                               | gm/100gm | 5.9 |
| Lysine                                | gm/100gm | 4.4 |
| Methionine                            | gm/100gm | 0.4 |
| Phenylalanine                         | gm/100gm | 4.8 |
| Threonine                             | gm/100gm | 3.4 |
| Tryptophan                            | gm/100gm | 1.3 |
| Valine                                | gm/100gm | 5.2 |

NOTE: dashes shown where data is unavailable or analyses have not been done

## Important Points to Note -

One other comparison that needs to be addressed is that flax seed contains some "antinutritional" compounds, and hence there have been warnings and restrictions placed on it use as a food.

**USDA** – when you get to the flaxseed page, a footnote at the bottom says "Up to 12 percent flax seed can safely be used as an ingredient in food.", although this is a reasonable amount; it does mean there are concerns about over consumption.



**FDA** – shows that the GRAS (Generally Regarded as Safe) application was withdrawn. GRAS status has not been granted to date.

**Health Canada** – had recommended that intake be limited in general, and should not be consumed if some medications are being taken.

Human consumption of flaxseed oil has been banned in France since 1973, and is restricted in Germany, Switzerland and Belgium.22,23,24 In the USA, human consumption is not prohibited, however flaxseed has not received GRAS (Generally Regarded as Safe) status from the FDA. This means that should a company decide to include flax in a food product, it shall be liable for the safety of that product

None of the toxic factors found in flax have been found in chia.

Data Sources:

www.azchia.com