tuber is said to remedy corns. The powdered tuber, with copper sulfate, is said to remedy callused fistulas. Europeans tie raw potatoes behind the ears for delirium.

Per 100 g, the tubers contain 76 to 82 calories, 77.7 to 79.8 g $H_2O$, 1.7 to 2.8 g protein, 0.1 to 0.2 g fat, 17.1 to 18.9 g total carbohydrate, 0.4 to 0.6 g fiber, 0.9 to 1.6 g ash, 7 to 13 mg Ca, 50 to 53 mg P, 0.6 to 1.1 mg Fe, 3 to 7 mg Na, 396 to 407 mg K, traces to 25 μg β-carotene equivalent, 0.07 to 0.11 mg thiamine, 0.03 to 0.04 mg riboflavin, 1.3 to 1.6 mg niacin, and 18 to 21 mg ascorbic acid. Mineral elements present are (mg/100 g): Mg, 20; Na, 11.0; K, 247; Cu, 0.21; S, 37.0; and Cl, 16.0; small quantities of iodine (11 μg/kg), Mn, and Zn are also present. Potato is among the richest foods in potassium, poorest in sodium. The more important sugars are sucrose, glucose, and fructose; some galactose, melibiose, raffinose, stachyose, planteose, myoinositol, maltotriose, manninotriose, galactinol, trigalactosyl glycerol, digalactosyl glycerol, glucosyl myoinositol, ribosylglucose, xylosyl-glucose, arabinosylglucose. Nonstarch polysaccharides include hemicellulose, cellulose, and pectic substances. The pectin content varies from 1.8 to 3.3%. The pectic substance consists of anhydrogalacturonic acid (51%) and polysaccharides (49%), composed of rhamnose (6%), fucose (0.6%), arabinose (5.6%), xylose (1.8%), and galactose (86%). The amino acid composition of potato globulin is as follows: arginine, 6.0; histidine 2.2; lysine, 7.7; tryptophan, 1.6; phenylalanine, 6.6; cystine, 2.1; methionine, 2.3; threonine, 5.9; and valine, 6.1%. The protein is somewhat deficient in sulfur amino acids and probably, also, histidine. It is rich in lysine. Potato contains, also, gamma-aminobutyric acid, alpha-aminobutyric acid, beta-alanine, and methionine sulphoxide. Other nitrogen compounds include: glutathione, choline, acetyl choline, trigonelline, cadaverine, adenine, hypoxanthine, and allantoin. Potato contains a phenolase, also called phenol oxidase, polyphenol oxidase, catecholase, and tyrosinase, which oxidizes phenols. The vitamins present in potato are, per 100 g edible material: vitamin A, 40 IU; thiamine, 0.1 mg; riboflavin, 0.01 mg; nicotinic acid, 1.2 mg; vitamin C, 17 mg; and choline, 100 mg. A small quantity of folic acid (total, 7.4 μg/100 g; free acid, 3.0 μg/100 g) is also present.[1] Linoleic acid is the predominant (41.3% of the total) acid in potato fat; other acids present are palmitic, 24.9; linolenic, 19.4; oleic, 6.4; stearic, 5.4; and myristic, 0.6%; two unidentified acids, and a few hydroxylated fatty acids are also reported to be present. Cholesterol, sigmasterol, and beta-sitosterol are present in the unsaponifiable fraction. Organic acids present in the tuber (excluding ascorbic acid, amino acids, and fatty acids) are lactic, succinic, oxalic, malic, tartaric, hydroxymalonic, citric, isocitric, aconitic, alpha-ketoglutaric, phytic, caffeic, quinic, and chlorogenic acids. Citric acid is present also in the stems and leaves. Tannins are localized in the suberized tissue of potato and are also present in potato leaves (*circa* 3.2%). Potato seeds contain 2-flavonol glycosides, kaempferol-3-diglucoside-7-rhamnoside, and kaempferol-3-triglucoside-7-rhamnoside. The flavonols, myricetin and quercitin, are also present. Volatiles from cooked potatoes include: hydrogen sulphide, acetaldehyde, methanethiol, acrolein, acetone, ethanethiol, dimethylsulphide, iso- and n-butyraldehyde, isovaleraldehyde, methylisopropylketone, etc.[1] Fresh potato tops may be used as feed for cattle and sheep. Analysis gave (dry-matter basis): total N, 1.82 to 2.30; crude fat, 3.06 to 4.63; crude fiber, 15.36 to 23.67; N-free extract, 40.46 to 50.51; and ash, 15.97 to 22.28; digestibility of protein, 60%.

**Toxicity** — Although the foliage is considered poisonous, some African tribes used the tip as a potherb, while others, like Mauritians, extract the green parts as a narcotic. Solanine is one toxic ingredient in the green tuber and sprouts. The "green fruit has caused fatalities"[3] . . . "potato with a green discoloration as a result of exposure to the sun, contains solanine and has been known to cause fatal poisonings."[3] There are records of severe solanine poisoning in 60 persons in Cyprus, with one death, from eating green potato shoots collected about the time of flowering and boiled *circa* $^1/_2$ hr before eating. The shoots contained *circa* 27 to 49 mg solanine per 100 g. Animals fed large residues of raw or cooked potato or