

RESEARCH EVIDENCE FOR NUTRIENTS IN 360ME FOR PSYCHOLOGICAL FUNCTIONING, MENTAL PERFORMANCE, COGNITIVE FUNCTIONING AND ENERGY

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EFSA HEALTH CLAIMS (EUROPEAN FOOD SAFETY AUTHORITY)

Tryptophan

Scientific Opinion on the substantiation of health claims related to L-tryptophan and **maintenance of normal sleep** (ID 596, 1671), **enhancement of mood** (ID 596), **contribution to normal cognitive function** (ID 596), and contribution to the maintenance or achievement of a normal body weight (ID 604) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2011.2073>

Tyrosine

Scientific Opinion on the substantiation of health claims related to L-tyrosine and **contribution to normal synthesis of catecholamines** (ID 1928), **increased attention** (ID 440, 1672, 1930), and contribution to normal muscle function (ID 1929) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2011.2270>

Glutamine

Scientific Opinion on the substantiation of health claims related to L-glutamine and growth or maintenance of muscle mass (ID 719, 722, 3185), faster restoration of muscle glycogen stores after strenuous exercise (ID 434, 699, 701, 723, 1569), skeletal muscle tissue repair (ID 721), **maintenance of normal neurological function** (ID 662, 700), **increased attention** (ID 700, 1570), **improvement of working memory** (ID 700, 1570), maintenance of defence against pathogenic gastro-intestinal microorganisms (ID 452), gut protein synthesis (ID 701), decreasing gut permeability (ID 701), and stimulating immunological responses (ID 1568) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2011.2225>

Carnitine

Scientific Opinion on the substantiation of health claims related to L-carnitine and faster recovery from muscle fatigue after exercise (ID 738, 1492, 1493), skeletal muscle tissue repair (ID 738, 1492, 1493), increase in endurance capacity (ID 4305, 4684), maintenance of normal blood LDL-cholesterol concentrations (ID 1494, 4684), contribution to normal spermatogenesis (ID 1822), **“energy metabolism”** (ID 1821), and increasing L-carnitine concentrations and/or decreasing free fatty acids in blood during pregnancy (ID 1495) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2011.2212>

Phenylalanine

Scientific Opinion on the substantiation of health claims related to L phenylalanine and **increased alertness** (ID 708, 1629), **enhancement of mood** (ID 657), pain relief (ID 657) and **improvement of memory** (ID 658) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1748>

Theanine

Scientific Opinion on the substantiation of health claims related to L-theanine from *Camellia sinensis* (L.) Kuntze (tea) and **improvement of cognitive function** (ID 1104, 1222, 1600, 1601, 1707, 1935, 2004, 2005), **alleviation of psychological stress** (ID 1598, 1601), **maintenance of normal sleep** (ID 1222, 1737, 2004) and reduction of menstrual discomfort (ID 1599) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2011.2238>

5HTP

Scientific Opinion on the substantiation of health claims related to 5 hydroxytryptophan and **enhancement of mood** (ID 1575) and **attention** (ID 1828) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2009.1273>

CoQ10

Scientific Opinion on the substantiation of health claims related to coenzyme Q10 and **contribution to normal energy-yielding metabolism** (ID 1508, 1512, 1720, 1912, 4668), maintenance of normal blood pressure (ID 1509, 1721, 1911), protection of DNA, proteins and lipids from oxidative damage (ID 1510), **contribution to normal cognitive function** (ID 1511), maintenance of normal blood cholesterol concentrations (ID 1721) and increase in endurance capacity and/or endurance performance (ID 1913) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1793>

B12

Scientific Opinion on the substantiation of health claims related to vitamin B12 and **contribution to normal neurological and psychological functions**: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2010.1756>

B5

Scientific Opinion on the substantiation of health claims related to pantothenic acid and **mental performance** (ID 58), **reduction of tiredness and fatigue** (ID 63), adrenal function (ID 204): EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1758>

B6

Scientific Opinion on the substantiation of health claims related to vitamin B6 and contribution to normal homocysteine metabolism (ID 73, 76, 199), **contribution to normal energy-yielding metabolism** (ID 75, 214), **contribution to normal psychological functions** (ID 77), **reduction of tiredness and fatigue** (ID 78), and **contribution to normal cysteine synthesis** (ID 4283) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1759>

B9

Scientific Opinion on the substantiation of health claims related to folate and **contribution to normal psychological functions** (ID 81, 85, 86, 88), **reduction of tiredness and fatigue** (ID 84), **cell division** (ID 195, 2881) and **contribution to normal amino acid synthesis** (ID 195, 2881) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1760>

B1

Scientific Opinion on substantiation of health claims related to thiamine and **energy-yielding metabolism** (ID 21, 24, 28), **function of the nervous system** (ID 22, 27) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2009.1222>

B2

Scientific Opinion on the substantiation of health claims related to riboflavin (vitamin B2) and **contribution to normal energy-yielding metabolism** (ID 29, 35, 36, 42), **contribution to normal psychological functions** (ID 32), **reduction of tiredness and fatigue** (ID 41), protection of DNA, proteins and lipids from oxidative damage (ID 207), and **maintenance of the normal function of the nervous system** (ID 213) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1814>

B3

Scientific Opinion on the substantiation of health claims related to niacin and **energy-yielding metabolism** (ID 43, 49, 54), **function of the nervous system** (ID 44, 53), pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2009.1224>

B7

Biotin and **contribution to normal energy-yielding metabolism**: evaluation of a health claim pursuant to Article 14 of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2015.4181>

C

Scientific Opinion on the substantiation of health claims related to vitamin C and **reduction of tiredness and fatigue** (ID 139, 2622), **contribution to normal psychological functions** (ID 140), regeneration of the reduced form of vitamin E (ID 202), **contribution to normal energy-yielding metabolism** (ID 2334, 3196), maintenance of the normal function of the immune system (ID 4321) and protection of DNA, proteins and lipids from oxidative damage (ID 3331) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1815>

D

Scientific Opinion on the substantiation of health claims related to vitamin D and **normal function of the immune system and inflammatory response** (ID 154, 159), maintenance of normal muscle function (ID 155) and maintenance of normal cardiovascular function (ID 159) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1468>

Magnesium

Scientific Opinion on the substantiation of health claims related to magnesium and **“hormonal health”** (ID 243), **reduction of tiredness and fatigue** (ID 244), **contribution to normal psychological functions** (ID 245, 246), maintenance of normal blood glucose concentrations (ID 342), maintenance of normal blood pressure (ID 344, 366, 379), protection of DNA, proteins and lipids from oxidative damage (ID 351), maintenance of the normal function of the immune system (ID 352), maintenance of normal blood pressure during pregnancy (ID 367), **resistance to mental stress** (ID 375, 381), reduction of gastric acid levels (ID 376), maintenance of normal fat metabolism (ID 378) and maintenance of normal muscle contraction (ID 380, ID 3083) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2010.1807>

Manganese

Scientific Opinion on the substantiation of health claims related to manganese and protection of DNA, proteins and lipids from oxidative damage (ID 309), maintenance of bone (ID 310), **energy-yielding metabolism** (ID 311), and **cognitive function** (ID 340) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2009.1217>

Zinc

Scientific Opinion on the substantiation of health claims related to zinc and function of the immune system (ID 291, 1757), DNA synthesis and cell division (ID 292, 1759), protection of DNA, proteins and lipids from oxidative damage (ID 294, 1758), **cognitive function** (ID 296), fertility and reproduction (ID 297, 300), pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2009.1229>

Copper

Scientific Opinion on the substantiation of health claims related to copper and protection of DNA, proteins and lipids from oxidative damage (ID 263, 1726), function of the immune system (ID 264), maintenance of connective tissues (ID 265, 271, 1722), **energy-yielding metabolism** (ID 266), **function of the nervous system** (ID 267), maintenance of skin and hair pigmentation (ID 268, 1724), iron transport (ID 269, 270, 1727), cholesterol metabolism (ID 369), and glucose metabolism (ID 369) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2009.1211>

Choline

Scientific Opinion on the substantiation of health claims related to choline and contribution to normal lipid metabolism (ID 3186), maintenance of normal liver function (ID 1501), **contribution to normal homocysteine metabolism** (ID 3090), **maintenance of normal neurological function** (ID 1502), **contribution to normal cognitive function** (ID 1502), and **brain and neurological development** (ID 1503) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

<https://doi.org/10.2903/j.efsa.2011.2056>

Inositol

Scientific Opinion on the substantiation of health claims related to inositol and **cognitive function** (ID 1588) pursuant to Article 13(1) of Regulation (EC) No 1924/2006: EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA).

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