

8. Reference list

Anonym 1. Internet communication. http://www.igv-gmbh.de/jb97_98/p_39.htm

Anonym 2. Internet communication. <http://www.bioprodukte-steinberg.de>

Anonym 3. Internet communication. <http://www.bio.utexas.edu/research/utex>

Arakawa, S., Tsurumi, N., Murakami, K., Muto, S., Hoshino, J., Yagi, T. (1960). Experimental breeding of white leghorn with the chlorella-added combined feed. *Jpn. J. Exp. Med.* 30, 185-192

Bock, H.D., (1966). Die Bewertung von Nahrungs- und Futterproteinen im Tierversuch unter besonderer Berücksichtigung der Bestimmung der biologischen Wertigkeit an wachsenden Albinoratten. *Hab. Schr.*, Rostock, Germany

Bock, H. D. & Wuensche, J., (1967). Untersuchungen über die Proteinqualität von zwei Grünalgenmehlen. *Jahrb. Tierernahr. Futt.* 6, 544-548

Borchers, R., (1977). Allantoin determination. *Ann. Biochem.* 79, 612-613

Brune, H. and Walz, O. P., (1978). Studies on some nutritive effects of the green alga, *Scenedesmus acutus* with pigs and broilers. *Arch.Hydrobiol.Beih.Ergebn.Limnol.* 11, 79-88

Butts, C. A., James, K. A. C., Koolaard, J. P., Booth, C. L., Donaldson, H. E., Scott, M. F., Moughan, P. J., (2002). The effect of digesta sampling time and dietary protein source on ileal nitrogen digestibility for the growing rat. *J. Sci. Food Agric.* 82, 343-350

Chin, T. Y., Cacini, W., Zmuda, M. J., and Quebbemann, A. J., (1980). Quantification of renal uric acid synthesis in the rat. *Am. J. Physiol.Renal Physiol.* 238, F481-F487

- Combs, G. F., (1952).** Algae (*Chlorella*) as a source of nutrients for the chick. *Science* 116, 453-454
- Cook, B. B., (1962).** The nutritive value of waste-grown algae. *Am. J. Public Health* 52, 243-251
- Cook, B. B., Lau, E. W., Bailey, B. M., (1963).** The protein quality of waste grown green algae. I. Quality of protein in mixtures of algae, nonfat powdered milk, and cereals. *J. Nutr.* 81, 23-29
- Dantas, D. C. M. & Queiroz, M. L. S., (1999).** Effects of *Chlorella vulgaris* on bone marrow progenitor cells of mice infected with *Listeria monocytogenes*. *Int. J. Immunopharmacol.* 21, 499-508
- Dantas, D. C. M., Kaneno, R., Queiroz, M. L. S., (1999).** The effects of *Chlorella vulgaris* in the protection of mice infected with *Listeria monocytogenes*. Role of natural killer cells. *Immunopharmacol. Immunotoxicol.* 21, 609-619
- Ecke, M., (2004).** Mikroalgen der Spezies *Chlorella vulgaris* - ein Naturprodukt mit in Europa bisher unbeachtetem pharmazeutischen Potential. Bioprodukte Prof.Steinberg GmbH. (<http://www.bioprodukte-steinberg.de>)
- Erchul, B. A. F., Isenberg, D. L., (1968).** Protein quality of various algal biomasses produced by a water reclamation pilot plant. *J. Nutr.* 95, 374-380
- Fevrier, C. and Seve, B., (1975).** Incorporation of a spiruline (*Spirulina maxima*) in swine food. *Ann. Nutr. Alim.* 29, 625-650
- Fink, H. & Herold, E., (1956).** Über die Eiweißqualität einzelliger Grünalgen und ihre Lebernekrose verhütende Wirkung. I Mitteilung. *Hoppe Seylers Z. Physiol. Chem.* 305, 182-191
- Fink, H. & Herold, E., (1957).** Über die Eiweißqualität der einzelliger Grünalgen und ihre Lebernekrose verhütende Wirkung. II Mitteilung. *Hoppe Seylers Z. Physiol. Chem.* 307, 202-216

References

Fisher, A. W., Jr. & Burlew, J. S., (1953). Nutritional value of microscopic algae. In: Algal culture. From laboratory to pilot plant (Burlew, J. S., ed.). Carnegie Institution of Washington Publication 600, Washington, DC., pp. 303-310

Friedl, T., (1998). Die Systematik und Stammesgeschichte der Gruenalgen – eine Herausforderung fuer die Molekularbiologie. *Biologie in unserer Zeit*, 4, 246-258

Greife, H. A., (1986). Studies upon the sites of bacterial breakdown of dietary purines within the gastrointestinal tract of the rat. *Z. Versuchstierkd.* 28, 33-40

Hasegawa, T., Okuda, M., Nomoto, K., Yoshikai, Y., (1994). Augmentation of the resistance against *Listeria monocytogenes* by oral administration of a hot water extract of *Chlorella vulgaris* in mice. *Immunopharmacol. Immunotoxicol.* 1,; 191-202

Hasegawa, T., Okuda, M., Makino, M., Hiromatsu, K., Nomoto, K., Yoshikai, Y., (1995). Hot water extracts of *Chlorella vulgaris* reduce opportunistic infection with *Listeria monocytogenes* in C57BL/6 mice infected with LP-BM5 murine leukemia viruses. *Int. J. Immunopharmacol.* 17, 505-512

Hasegawa, T., Kimura, Y., Hiromatsu, K., Kobayashi, N., Yamada, A., Makino, M., Okuda, M., Sano, T., Nomoto, K., Yoshikai, Y., (1997). Effect of hot water extract of *Chlorella vulgaris* on cytokine expression patterns in mice with murine acquired immunodeficiency syndrome after infection with *Listeria monocytogenes*. *Immunopharmacol.* 35, 273-282

Hasegawa, T., Noda, K., Kumamoto, S., Ando, Y., Yamada, A., Yoshikai, Y., (2000). *Chlorella vulgaris* culture supernatant (CVS) reduces psychological stress-induced apoptosis in thymocytes of mice. *Int. J. Immunopharmacol.* 22, 877-885

- Hasegawa, T., Matsuguchi, T., Noda, K., Tanaka, K., Kumamoto, S., Shoyama, Y., Yoshikai, Y., (2002).** Toll-like receptor 2 is at least partly involved in the antitumor activity of glycoprotein from *Chlorella vulgaris*. *Int. Immunopharmacol.* 2, 579-589
- Heaf, D. J. & Davies, J. I., (1976).** The effect of RNA supplementation of rat diets on the composition of body fluids. *Br. J. Nutr.* 36, 381-402
- Hennig, A., Gruhn, K., Kleemann, J., Hahn, G., (1970).** Pruefung der Verdaulichkeit und der N-Bilanz von *Scenedesmus quadricauda* an Schweinen und Broilern. *Jahrb. Tierernahr. Futt.* 7, 426-434
- Hintz, H. F., Heitman, H., Weir, W. C., Torell, D. T., Meyer, J. H., (1966).** Nutritive value of algae grown on sewage. *J. Anim. Sci.* 25, 675-681
- Iarmonienko, S. P., Tzyb, A. F., Ogaki, M., (1991).** Clinical evaluation of *Chlorella vulgaris* strain E-25 as a nutrition additive (preliminary results). Summary of the Japan-USSR bilateral conference on experimental and clinical studies on E-25 green algae. Pasteur Institute of Kyoto, Kyoto, Japan, May 11-12, 1991
- Ibusuki, K. & Minamishima, Y., (1990).** Effect of *Chlorella vulgaris* extracts on murine cytomegalovirus infections. *Nat. Immun. Cell Growth Regul.* 9, 121-128
- Ishibashi, M., (1971).** Effects of chlorella feeding on rats: II. Effects on reproduction. *Bull. Azabu Vet. Coll.* 22, 133-140
- James, K. A. C., Butts, C. A., Koolaard, J. P., Donaldson, H. E., Scott, M. F., Moughan, P. J., (2002).** The effect of feeding regimen on apparent and true ileal nitrogen digestibility for rats fed diets containing different sources of protein. *J. Sci. Food Agric.* 82, 1050-1060
- Jansen, G. R. & Monte, W. C., (1977).** Amino-acid fortification of bread fed at varying levels during gestation and lactation in rats. *J. Nutr.* 107, 300-309

References

- Justo, G. Z., Silva, M. R., Queiroz, M. L. S., (2001).** Effects of the green algae *Chlorella vulgaris* on the response of the host hematopoietic system to intraperitoneal Ehrlich ascites tumor transplantation in mice. *Immunopharmacol. Immunotoxicol.* 23, 119-132
- Kapoor, R. & Mehta, U., (1993a).** Effect of supplementation of blue green alga (*Spirulina*) on outcome of pregnancy in rats. *Plant Foods Hum. Nutr.* 43, 29-35
- Kapoor, R. & Mehta, U., (1993b).** Iron status and growth of rats fed different dietary iron sources. *Plant Foods Hum. Nutr.* 44, 29-34
- Kapoor, R. & Mehta, U., (1998).** Supplementary effect of spirulina on hematological status of rats during pregnancy and lactation. *Plant Foods Hum. Nutr.* 52, 315-324
- Kay, R. A., (1991).** Microalgae as food and supplement. *Crit. Rev. Food Sci. Nutr.* 30, 555-573
- Koehler, P. & Kallweit, E., (2000).** Influence of algae supplementation on reproduction performance of sows. In: Pulz, O. and Oerdoeg, V. 4th European Workshop "Biotechnology of Microalgae", Bergholz-Rehbruecke, Germany, pp. 1
- Koguchi, T., Nakajima, H., Wada, M., Yamamoto, Y., Innami, S., Maekawa, A., Tadokoro, T., (2002).** Dietary fiber suppresses elevations of uric acid and allantoin in serum and urine induced by dietary RNA and increases its excretion to feces in rats. *J. Nutr. Sci. Vitaminol.* 48, 184-193
- Koguchi, T., Nakajima, H., Koguchi, H., Wada, M., Yamamoto, Y., Innami, S., Maekawa, A., Tadokoro, T., (2003).** Suppressive effect of viscous dietary fiber on elevations of uric acid in serum and urine induced by dietary RNA in rats is associated with strength of viscosity. *Int. J. Vit. Nutr. Res.* 73, 369-376

Kojima, M., Kasajima, T., Imai, Y., Kobayashi, S., Dobashi, M., Uemura, T., (1973). A new chlorella polysaccharide and its accelerating effect on the phagocytic activity of the reticuloendothelial system. *Rec. Adv. RES Res. (Tokyo)* 13, 101-122

Komaki, H., Yamashita, M., Niwa, Y., Tanaka, Y., Kamiya, N., Ando, Y., Furuse, M., (1998). The effect of processing of *Chlorella vulgaris*: K-5 on in vitro and in vivo digestibility in rats. *Anim. Feed Sci. Tech.* 70, 363-366

Konishi, F., Tanaka, K., Himeno, K., Taniguchi, K., Nomoto, K., (1985). Antitumor effect induced by a hot water extract of *Chlorella vulgaris* (CE): resistance to Meth-A tumor growth mediated by CE-induced polymorphonuclear leukocytes. *Cancer Immunol. Immunother.* 19, 73-78

Konishi, F., Tanaka, H., Kumamoto, S., Hasegawa, T., Okuda, M., Yano, I., Yoshikai, Y., Nomoto, K., (1990). Enhanced resistance against *Escherichia coli* infection by subcutaneous administration of the hot-water extract of *Chlorella vulgaris* in cyclophosphamide-treated mice. *Cancer Immunol. Immunother.* 32, 1-7

Konishi, F., Mitsuyama, M., Okuda, M., Tanaka, K., Hasegawa, T., Nomoto, K., (1996). Protective effect of an acidic glycoprotein obtained from culture of *Chlorella vulgaris* against myelosuppression by 5-fluorouracil. *Cancer Immunol. Immunother.* 42, 268-274

Kotrbaček, V., Halouzka, R., Jurajda, V., Knotkova, Z., Filka, J., (1994). Increased immune response in broilers after administration of natural food supplements. *Vet. Med. (Praha)* 39, 321-328

Kraut, H., Jekat, F., Pabst, W. (1966). Utilization and biological value of the protein in the unicellular green alga *Scenedesmus obliquus* as shown by balance studies in the rat. *Eur. Z. Ernähr. Diät.* 8, 130-144

References

- Kreienbring F., (1987).** Weitere Ergebnisse zur vergleichenden Bestimmung von Aminosäuren. *Nahr.* 31, 855-862
- Kreienbring F. & Wuensche J., (1974).** Bericht ueber die Stickstoff- und Aminosäurenbestimmungs-Enquete 1971/72 im Themenkreis und ueber weitere methodische Arbeiten. *Akad Landwirtsch-Wiss DDR* 124, 19-34.
- Kremer, G., Vis, M., Prudich, M., Bayless, D., (2004).** Practical photosynthetic carbon dioxide mitigation. <http://www.ent.ohiou.edu/~ohiocoal/projects/algae.pdf>
- Lee, S. K., Fox, H. M., Kies, C., Dam, R., (1967).** The supplementary value of algae protein in human diets. *J. Nutr.* 92, 281-285
- Leveille, G. A., Sauberlich, H. E., Shockley, J. W., (1962).** Protein value and the amino acid deficiencies of various algae for growth of rats and chicks. *J. Nutr.* 76, 423-428
- Lin, Y. Ch., (1969).** The supplementary effect of algae on the nutritive value of soybean milk. *J.F.M.A.* 68, 15-21
- Lipstein, B. & Hurwitz, S. (1980).** The nutritional value of algae for poultry. Dried *Chlorella* in broiler diets. *Br. Poultry Sci.* 21, 9-21
- Lipstein, B., Hurwitz, S., Bornstein, S., (1980).** The nutritional value of algae for poultry. Dried *Chlorella* in layer diets. *Br. Poultry Sci.* 21, 23-27
- Low, A. G., (1982).** Digestibility and availability of amino-acids from feedstuffs for pigs - a review. *Livestock Prod. Sci.* 9, 511-520
- Lubitz, J. A., (1963).** The protein quality, digestibility, and composition of algae, chlorella 71105. *J. Food Sci.* 28, 229-232

Matsuura, E., Nemoto, T., Hozumi, H., Izumi, K., Saito, Y., Ishida, H., Fukimbara, T., Kawahara, H., (1991). Effect of chlorella on rats with iron deficient anemia. *Kitasato Arch. Exp. Med.* 64, 193-204

Meffert, M. E., (1961). Die Wirkung der Substanz von *Scenedesmus obliquus* als Eiweißquelle in Fütterungsversuchen und die Beziehung zur Aminosäure-Zusammensetzung. *Forschungsberichte des Landes Nordrhein-Westfalen*, Westdeutscher Verlag / Köln und Opladen (952)

Meffert, M. E. & Pabst, W., (1963). Über die Verwertbarkeit der Substanz von *Scenedesmus obliquus* als Eiweißquelle in Ratten-Bilanz-Versuchen. *Eur. Z. Ernähr. Diät.* 5, 235-254

Merchant, R. E., Carmack, C. A., Wise, C. M., (2000a). A double-blind, placebo-controlled (DBPC), crossover study of dietary supplementation with *Chlorella pyrenoidosa* for fibromyalgia syndrome. *Faseb J.* 14, A738

Merchant, R. E., Carmack, C. A., Wise, C. M. (2000b). Nutritional supplementation with *Chlorella pyrenoidosa* for patients with fibromyalgia syndrome: A pilot study. *Phytother. Res.* 14, 167-173

Merchant, R. E. & Andre, C. A., (2001). A review of recent clinical trials of the nutritional supplement *Chlorella pyrenoidosa* in the treatment of fibromyalgia, hypertension, and ulcerative colitis. *Altern. Ther. Health Med.* 7, 79-91

Miranda, M. S., Sato, S., Mancini-Filho, J., (2001). Antioxidant activity of the microalga *Chlorella vulgaris* cultured on special conditions. *Boll. Chim. Farmaceut.* 140, 165-168

Mitchell, H. H., (1924). A method of determining the biological value of protein. *J. Biol. Chem.* 58, 873

References

- Mitchell, H. H. & Carman, G. G., (1926).** The biological value of the nitrogen mixtures of patent flour and animal food. *Ibid.* 68, 183-215
- Morimoto, T., Nagatsu, A., Murakami, N., Sakakibara, J., Tokuda, H., Nishino, H., Iwashima, A., (1995).** Anti-tumour-promoting glyceroglycolipids from the green alga, *Chlorella vulgaris*. *Phytochem.* 40, 1433-1437
- Morita, K., Matsueda, T., Iida, T., Hasegawa, T., (1999).** *Chlorella* accelerates dioxin excretion in rats. *J. Nutr.* 129, 1731-1736
- Morita, K., Ogata, M., Hasegawa, T., (2001).** Chlorophyll derived from *Chlorella* inhibits dioxin absorption from the gastrointestinal tract and accelerates dioxin excretion in rats. *Envir. Health Persp.* 109, 289-294
- Myers, J., (1953).** The biology of the algae: A brief summary. In: Algal culture. From laboratory to pilot plant (Burlew, J. S., ed.), Carnegie Institution of Washington Publication 600, Washington, DC, pp. 31-36
- Narasimha, D. L. R., Venkataraman, G. S., Duggal, S. K., Eggum, B. O., (1982).** Nutritional quality of the blue-green alga *Spirulina platensis* Geitler. *J. Sci. Food Agric.* 33, 456-460
- Noda, K., Ohno, N., Tanaka, K., Kamiya, N., Okuda, M., Yadomae, T., Nomoto, K., Shoyama, Y., (1996).** A water-soluble antitumor glycoprotein from *Chlorella vulgaris*. *Planta Med.* 62, 423-426
- NRC (National Research Council), (1995).** Nutrient Requirements of Laboratory Animals (Nutrient Requirements of Domestic Animals), *National Academy Press. Washington DC*
- Oh-Hama, T. & Miyachi, S., (1993).** Chlorella. In: Micro-algal biotechnology (Borowitzka, M. A. & Borowitzka, L. J., eds.), Cambridge University Press, Cambridge, pp. 3-26

- Okamoto, K., Iizuka, Y., Murakami, T., Miyake, H., Suzuki, T., (1978).** Effects of chlorella alkali extract on blood pressure in SHR. *Jpn. Heart J.* 19, 622-623
- Okuda, M., Hasegawa, T., Sonoda, M., Okabe, T., Tanaka, Y., (1975).** The effects of *Chlorella* on the levels of cholesterol in serum and liver. *Jpn. J. Nutr.* 33, 3-8
- Oswald, W. J., (1993).** Micro-algae and waste-water treatment. In: Micro-algal biotechnology (Borowitzka, M. A. & Borowitzka, L. J., eds.), Cambridge University Press, Cambridge, pp. 305-328
- Pabst, W., Jekat, F., Rolle, I., (1964).** The utilization of carbohydrates, fats, phosphorus and nitrogen from roller-dried *Scenedesmus* substance as shown by balance studies in the rat. *Eur. Z. Ernahr. Diat.* 6, 279-295
- Pabst, W., (1974).** Die Proteinqualität einiger Mikroalgenarten, ermittelt im Ratten-Bilanzversuch. 1. *Scenedesmus*, *Coelastrum* und *Uronema*. *J. Nutr. Sci.* 13, 73-80
- Pabst, W., Payer, H. D., Rolle, I., Soeder, C. J. (1978).** Multigeneration feeding studies in mice for safety evaluation of the microalga, *Scenedesmus acutus*. I. Biological and haematological data. *Food Cosmet. Toxicol.* 16, 249-254
- Pak, N., Donoso, G., Tagle, M. A., (1973).** Allantoin excretion in the rat. *Br. J. Nutr.* 30, 107-112
- Pratt, R & Johnson, E., (1965).** Production of Thiamine, Riboflavin, Folic Acid, and Biotin by *Chlorella vulgaris* and *Chlorella pyrenoidosa*. *J. Pharm. Sci.* 54, 871-874
- Pratt, R & Johnson, E., (1966).** Production of Panthotenic acid and Inositol by *Chlorella vulgaris* and *C. pyrenoidosa*. *J. Pharm. Sci.* 55, 799-802

References

- Pratt, R & Johnson, E. (1967).** Vitamin C and Choline Content of *Chlorella vulgaris* and *C. pyrenoidosa*. *J. Pharm. Sci.* 56, 536-537
- Priestley, G., (1975).** Algal Proteins. In: Food from Waste (Birch, G. G., Parker, K. J., & Worgan, J. T., eds.), Applied Science Publishers Ltd, London, pp. 114-138
- Pulz, O., Scheibenbogen, K., Gross, W., (2000).** Biotechnology with Cyanobacteria and Microalgae. In: *Biotechnology* (Rehm, H.-J. & Reed, G., eds.) 2 (10), Weinheim, pp. 105-136
- Queiroz, M. L. S., Bincoletto, C., Valadares, M. C., Dantas, D. C. M., Santos, L. M. B., (2002).** Effects of *Chlorella vulgaris* extract on cytokines production in *Listeria monocytogenes* infected mice. *Immunopharmacol. Immunotoxicol.* 24, 483-496
- Queiroz, M. L. S., Rodrigues, A. P. O., Bincoletto, C., Figueiredo, C. A. V., Malacrida, S., (2003).** Protective effects of *Chlorella vulgaris* in lead-exposed mice infected with *Listeria monocytogenes*. *Int. Immunopharmacol.* 3, 889-900
- Rangachar, T. R. S., Balasubramanya, R. H., Setty, S. V. S., (1973).** Responses to algal supplementation in poultry. *Mysore J. Agric. Sci.* 7, 631-638
- Rotkowska, D., Vacek, A., Bartonickova, A., (1989).** The radioprotective effects of aqueous extract from chlorococcal freshwater algae (*Chlorella kessleri*) in mice and rats. *Strahlenther. Oncol.* 165, 813-816
- Rydlo, O., (1977).** *Chlorella* and *Scenedesmus* in practice. *Cesko-slovenska farmacie: casopis ceske farmaceuticke spolecnosti a slov* 26, 80-81
- Saleh, A. M., Hussein, L. A., Abdalla, F. E., El-Fouly, M. M., Shaheen, A. B., (1985).** The nutritional quality of drum-dried algae produced in open door mass culture. *Z. Ernährungswiss.* 24, 256-263

- Sano, T. & Tanaka, Y., (1987).** Effect of dried, powdered *Chlorella vulgaris* on experimental atherosclerosis and alimentary hypercholesterolemia in cholesterol-fed rabbits. *Artery* 14, 76-84
- Sano, T., Kumamoto, S., Kamiya, N., Okuda, M., Tanaka, Y., (1988).** Effect of lipophilic extract of *Chlorella vulgaris* on alimentary hyperlipidemia in cholesterol-fed rats. *Artery* 15, 217-224
- Sarma, L., Tiku, A. B., Kesavan, P. C., Ogaki, M., (1993).** Evaluation of radioprotective action of a mutant (E-25) form of *Chlorella vulgaris* in mice. *J. Radiat. Res.* 34, 277-284
- Schneegurt, M. A., Arieli, B., Mckeehen, J. D., Stephens, S. D., Nielsen, S. S., Saha, P. R., Trumbo, P. R., Sherman, L. A., (1995).** Compositional and toxicological evaluation of the diazotrophic Cyanobacterium, Cyanothecce Sp strain Atcc-51142. *Aquacult.* 134, 339-349
- Schoenhusen, U., Voigt, J., Piatkowski, B., (1988).** The use of ribonucleic acid as a marker for measuring microbial protein yield in the rumen. 1. Chemical determination of ribonucleic acid. *Arch. Tierernahr.* 38, 289-297
- Schoenhusen, U., Voigt, J., (2004).** Ruminal degradability of 15N labelled ribonucleic acid in grass. *Arch. Anim. Nutr.* 58, 343-352
- Shibata, S., Natori, Y., Nishihara, T., Tomisaka, K., Matsumoto, K., Sansawa, H., & Nguyen, V. C., (2003).** Antioxidant and anti-cataract effects of *Chlorella* on rats with streptozotocin-induced diabetes. *J. Nutr. Sci. Vitaminol.* 49, 334-339
- Singh, A., Singh, S. P., Bamezai, R., (1998).** Perinatal influence of *Chlorella vulgaris* (E-25) on hepatic drug metabolizing enzymes and lipid peroxidation. *Anticancer Res.* 18, 1509-1514
- Singh, A., Singh, S. P., Bamezai, R., (1999).** Inhibitory potential of *Chlorella vulgaris* (E-25) on mouse skin papillomagenesis and xenobiotic detoxication system. *Anticancer Res.* 19, 1887-1892

References

- Singh, S. P., Tiku, A. B., and Kesavan, P. C., (1995).** Post-exposure radioprotection by *Chlorella vulgaris* (E-25) in mice. *Indian J. Exp. Biol.* 33, 612-615
- Spoehr, H. A. & Milner, H. W., (1949).** The chemical composition of *Chlorella*; effect of environmental conditions. *Plant Physiol.* 24, 120-149
- Sugimoto, Y., Taga, C., Nishiga, M., Fujwara, M., Konishi, F., Tanaka, K., Kamei, C., (2002).** Effect of docosahexaenoic acid-fortified *Chlorella vulgaris* strain CK22 on the radial maze performance in aged mice. *Biol. Pharm. Bull.* 25, 1090-1092
- Tanaka, K., Konishi, F., Himeno, K., Taniguchi, K., Nomoto, K., (1984).** Augmentation of antitumor resistance by a strain of unicellular green algae, *Chlorella vulgaris*. *Cancer Immunol. Immunother.* 17, 90-94
- Tanaka, K., Koga, T., Konishi, F., Nakamura, M., Mitsuyama, M., Himeno, K., Nomoto, K., (1986).** Augmentation of host defense by a unicellular green alga, *Chlorella vulgaris*, to *Escherichia coli* infection. *Infect. Immun.* 53, 267-271
- Tanaka, K., Yamada, A., Noda, K., Shoyama, Y., Kubo, C., Nomoto, K., (1997).** Oral administration of an unicellular green algae, *Chlorella vulgaris*, prevents stress-induced ulcer. *Planta Med.* 63, 465-466
- Tanaka, K., Konishi, F., Maruyama, I., Yukino, T., Kitsuki, H., Kumagaki, T., Hada, T., Hayashi, M., (2002).** Preliminary clinical survey of the docosahexaenoic acid (DHA)-enriched *Chlorella vulgaris* strain CK22 on serum lipid levels and its safety monitoring in middle-aged humans. *J. Jpn Soc. Nutr. Food Sci.* 55, 323-330
- Tkachev, I. F., (1966).** Chlorella - biologiceskij stimuljator rosta zivotnych. *Vestnik sel'skochozjajstvennoj nauki* 11, 81-86

Trubachev, I. N., Gitelsohn, I. I., Kalachyova, G. S., Barashkov, V. A., Belyanin, V. N., Andreyeva, R. I. (1976). Biochemical composition of blue-green algae and *Chlorella*. *Prikl. Biokhim. Mikrobiol.* 12, 196-202

Tsuchida, T., Mashiko, K., Yamada, K., Hiratsuka, H., Shimada, T., Itagaki, Y., Fujinuma, H., Samejima, K., Nakamura, T., Hasegawa, T., Matsubayashi, T., (2003). Clinical study of gamma-aminobutyric acid-rich *Chlorella* for subjects with high-normal blood pressure and mild hypertension. *J. Jpn Soc. Nutr. Food Sci.* 56, 97-102

Uehara, A., Okumura, T., Kitamori, S., Shibata, Y., Harada, K., Okamura, K., Tagasugi, Y., Namiki, M., (1992). Gastric antisecretory and antiulcer actions of interleukin-1. Evidence for the presence of an "immune-brain-gut" axis. *J. Clin. Gastroenterol.* 14, 149-155

Vacek, A., Rotkowska, D., Bartonickova, A., (1990). Radioprotection of hemopoiesis conferred by aqueous extract from chlorococcal algae (Ivastimul) administered to mice before irradiation. *Exp. Hematol.* 18, 234-237

Venkataraman, L. V., Becker, W. E., Rajasekaran, T., Mathew, K. R., (1980). Investigations on the toxicology and safety of algal diets in albino rats. *Food Cosmet. Toxicol.* 18, 271-275

Witt, M., Schröder, J., Mehden, H., (1962). Zur Frage der Verwendung von Algeneiweiß in der Schweinemast. *Zuchtungskd.* 34, 272-281

Witt, M. & Schröder, J., (1967). Die einzellige Süßwasser-Grünalge *Scenedesmus obliquus*, ein vollwertiges Eiweißbeifutter in der Schweinemast. *Landwirt. Forsch.* 20, 148-156

Yap, T. N., Wu, J. F., Pond, W. G., Krook, L., (1982). Feasibility of feeding *Spirulina maxima*, *Arthrospira platensis* or *Chlorella* sp to pigs weaned to a dry diet at 4 to 8 days of age. *Nutr. Rep.Int.* 25, 543-552

References

- Yasukawa, K., Akihisa, T., Kanno, H., Kaminaga, T., Izumida, M., Sakoh, T., Tamura, T., Takido, M., (1996).** Inhibitory effects of sterols isolated from *Chlorella vulgaris* on 12-0-tetradecanoylphorbol-13-acetate-induced inflammation and tumor promotion in mouse skin. *Biol. Pharm. Bull.* 19, 573-576
- Yokozawa, T., Oura, H., Okada, T., (1982).** Metabolic effects of dietary purine in rats. *J. Nutr. Sci. Vitamin.* 28, 519-526
- Yoshida, M. & Hoshii, H., (1980).** Nutritive value of *Spirulina*, green algae, for poultry feed. *Jpn Poultry Sci.* 17, 27-30
- Young, E. G. & Conway, C. F., (1942).** On the estimation of allantoin by the Rimini-Schryver reaction. *J. Biol. Chem.* 142, 839-853
- Yukino, T., Tanaka, K., Maruyama, I., Konishi, F., Kumagaki, T., Hada, T., Hayashi, M., (2002).** Lipid and fatty acid compositions of DHA-fortified *Chlorella vulgaris* strain CK22. *J. Jpn Soc. Nutr. Food Sci.* 55, 331-337