# SEBORRHEIC DERMATITIS

A MEDICAL DICTIONARY, BIBLIOGRAPHY,
AND ANNOTATED RESEARCH GUIDE TO
INTERNET REFERENCES



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#### **FORWARD**

In March 2001, the National Institutes of Health issued the following warning: "The number of Web sites offering health-related resources grows every day. Many sites provide valuable information, while others may have information that is unreliable or misleading." Furthermore, because of the rapid increase in Internet-based information, many hours can be wasted searching, selecting, and printing. Since only the smallest fraction of information dealing with seborrheic dermatitis is indexed in search engines, such as **www.google.com** or others, a non-systematic approach to Internet research can be not only time consuming, but also incomplete. This book was created for medical professionals, students, and members of the general public who want to know as much as possible about seborrheic dermatitis, using the most advanced research tools available and spending the least amount of time doing so.

In addition to offering a structured and comprehensive bibliography, the pages that follow will tell you where and how to find reliable information covering virtually all topics related to seborrheic dermatitis, from the essentials to the most advanced areas of research. Public, academic, government, and peer-reviewed research studies are emphasized. Various abstracts are reproduced to give you some of the latest official information available to date on seborrheic dermatitis. Abundant guidance is given on how to obtain free-of-charge primary research results via the Internet. While this book focuses on the field of medicine, when some sources provide access to non-medical information relating to seborrheic dermatitis, these are noted in the text.

E-book and electronic versions of this book are fully interactive with each of the Internet sites mentioned (clicking on a hyperlink automatically opens your browser to the site indicated). If you are using the hard copy version of this book, you can access a cited Web site by typing the provided Web address directly into your Internet browser. You may find it useful to refer to synonyms or related terms when accessing these Internet databases. **NOTE:** At the time of publication, the Web addresses were functional. However, some links may fail due to URL address changes, which is a common occurrence on the Internet.

For readers unfamiliar with the Internet, detailed instructions are offered on how to access electronic resources. For readers unfamiliar with medical terminology, a comprehensive glossary is provided. For readers without access to Internet resources, a directory of medical libraries, that have or can locate references cited here, is given. We hope these resources will prove useful to the widest possible audience seeking information on seborrheic dermatitis.

The Editors

<sup>&</sup>lt;sup>1</sup> From the NIH, National Cancer Institute (NCI): http://www.cancer.gov/cancerinfo/ten-things-to-know.

#### CHAPTER 1. STUDIES ON SEBORRHEIC DERMATITIS

#### Overview

In this chapter, we will show you how to locate peer-reviewed references and studies on seborrheic dermatitis.

#### The Combined Health Information Database

The Combined Health Information Database summarizes studies across numerous federal agencies. To limit your investigation to research studies and seborrheic dermatitis, you will need to use the advanced search options. First, go to <a href="http://chid.nih.gov/index.html">http://chid.nih.gov/index.html</a>. From there, select the "Detailed Search" option (or go directly to that page with the following hyperlink: <a href="http://chid.nih.gov/detail/detail.html">http://chid.nih.gov/detail/detail.html</a>). The trick in extracting studies is found in the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Journal Article." At the top of the search form, select the number of records you would like to see (we recommend 100) and check the box to display "whole records." We recommend that you type "seborrheic dermatitis" (or synonyms) into the "For these words:" box. Consider using the option "anywhere in record" to make your search as broad as possible. If you want to limit the search to only a particular field, such as the title of the journal, then select this option in the "Search in these fields" drop box. The following is what you can expect from this type of search:

#### • Treatment of Seborrheic Dermatitis

Source: American Family Physician. 61(9): 2703-2710. May 1, 2000.

Contact: American Academy of Family Physicians. 11400 Tomahawk Creek Parkway, Leawood, KS 66211-2672. (800) 274-2237 or (913) 906-6000. E-mail: fp@aafp.org. Website: www.aafp.org.

Summary: This journal article provides health professionals with information on the clinical features and treatment of **seborrheic dermatitis**. This chronic inflammatory disorder affects areas of the head and trunk where sebaceous glands are most prominent. Common sites of involvement are the hairy areas of the head, the forehead, the nasolabial folds, the external ear canals, and the postauricular creases. **Seborrhea** of

the trunk may appear in the presternal area and in the body folds. Lipophilic yeasts of the Malassezia genus, as well as genetic, environmental, and general health factors, contribute to this disorder. Scalp **seborrhea** varies from mild **dandruff** to dense, diffuse, adherent scale. Facial and trunk **seborrhea** is characterized by powdery or greasy scale in skin folds and along hair margins. Hygiene issues play a key role in controlling **seborrheic dermatitis.** Frequent cleansing with soap removes oils from affected areas and improves **seborrhea**. Outdoor recreation will also improve **seborrhea**. General pharmacologic treatment options include antifungal preparations such as selenium sulfide, pyrithione zinc, azole agents, sodium sulfacetamide, and topical terbinafine that decrease colonization by lipophilic yeast and antiinflammatory agents. For severe disease, keratolytics such as salicylic acid or coal tar preparations may be used to remove dense scale, then topical steroids may be applied. The article presents specific treatment options for the scalp and beard areas, the face, and the trunk and discusses the use of isotretinoin or topical steroid therapy to treat severe **seborrhea**. 9 figures, 1 table, and 14 references. (AA-M).

#### Federally Funded Research on Seborrheic Dermatitis

The U.S. Government supports a variety of research studies relating to seborrheic dermatitis. These studies are tracked by the Office of Extramural Research at the National Institutes of Health.<sup>2</sup> CRISP (Computerized Retrieval of Information on Scientific Projects) is a searchable database of federally funded biomedical research projects conducted at universities, hospitals, and other institutions.

Search the CRISP Web site at <a href="http://crisp.cit.nih.gov/crisp/crisp\_query.generate\_screen">http://crisp.cit.nih.gov/crisp/crisp\_query.generate\_screen</a>. You will have the option to perform targeted searches by various criteria, including geography, date, and topics related to seborrheic dermatitis.

For most of the studies, the agencies reporting into CRISP provide summaries or abstracts. As opposed to clinical trial research using patients, many federally funded studies use animals or simulated models to explore seborrheic dermatitis.

#### E-Journals: PubMed Central<sup>3</sup>

PubMed Central (PMC) is a digital archive of life sciences journal literature developed and managed by the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine (NLM).<sup>4</sup> Access to this growing archive of e-journals is free and unrestricted.<sup>5</sup> To search, go to http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=Pmc,

<sup>&</sup>lt;sup>2</sup> Healthcare projects are funded by the National Institutes of Health (NIH), Substance Abuse and Mental Health Services (SAMHSA), Health Resources and Services Administration (HRSA), Food and Drug Administration (FDA), Centers for Disease Control and Prevention (CDCP), Agency for Healthcare Research and Quality (AHRQ), and Office of Assistant Secretary of Health (OASH).

<sup>&</sup>lt;sup>3</sup> Adapted from the National Library of Medicine: http://www.pubmedcentral.nih.gov/about/intro.html.

<sup>&</sup>lt;sup>4</sup> With PubMed Central, NCBI is taking the lead in preservation and maintenance of open access to electronic literature, just as NLM has done for decades with printed biomedical literature. PubMed Central aims to become a world-class library of the digital age.

<sup>&</sup>lt;sup>5</sup> The value of PubMed Central, in addition to its role as an archive, lies in the availability of data from diverse sources stored in a common format in a single repository. Many journals already have online publishing operations, and there is a growing tendency to publish material online only, to the exclusion of print.

and type "seborrheic dermatitis" (or synonyms) into the search box. This search gives you access to full-text articles. The following is a sample of items found for seborrheic dermatitis in the PubMed Central database:

• Fast, Noninvasive Method for Molecular Detection and Differentiation of Malassezia Yeast Species on Human Skin and Application of the Method to Dandruff Microbiology. by Gemmer CM, DeAngelis YM, Theelen B, Boekhout T, Dawson, Jr. TL.; 2002 Sep;

http://www.pubmedcentral.gov/articlerender.fcgi?tool=pmcentrez&artid=130704

#### The National Library of Medicine: PubMed

One of the quickest and most comprehensive ways to find academic studies in both English and other languages is to use PubMed, maintained by the National Library of Medicine.<sup>6</sup> The advantage of PubMed over previously mentioned sources is that it covers a greater number of domestic and foreign references. It is also free to use. If the publisher has a Web site that offers full text of its journals, PubMed will provide links to that site, as well as to sites offering other related data. User registration, a subscription fee, or some other type of fee may be required to access the full text of articles in some journals.

To generate your own bibliography of studies dealing with seborrheic dermatitis, simply go to the PubMed Web site at <a href="http://www.ncbi.nlm.nih.gov/pubmed">http://www.ncbi.nlm.nih.gov/pubmed</a>. Type "seborrheic dermatitis" (or synonyms) into the search box, and click "Go." The following is the type of output you can expect from PubMed for seborrheic dermatitis (hyperlinks lead to article summaries):

• "One's" therapy of seborrheic dermatitis.

Author(s): Kee CE.

Source: West Med Med J West. 1966 April; 7(4): Suppl 2: 10-3. No Abstract Available. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4222970

A clinical concept of seborrheic dermatitis.

Author(s): Ackerman AB.

Source: Med Times. 1967 January; 95(1): 16-28. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4226945

• A double-blind placebo-controlled study of ketoconazole + desonide gel combination in the treatment of facial seborrheic dermatitis.

Author(s): Pierard-Franchimont C, Pierard GE.

Source: Dermatology (Basel, Switzerland). 2002; 204(4): 344-7.

<sup>&</sup>lt;sup>6</sup> PubMed was developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM) at the National Institutes of Health (NIH). The PubMed database was developed in conjunction with publishers of biomedical literature as a search tool for accessing literature citations and linking to full-text journal articles at Web sites of participating publishers. Publishers that participate in PubMed supply NLM with their citations electronically prior to or at the time of publication.

## • A multicenter randomized trial of ketoconazole 2% and zinc pyrithione 1% shampoos in severe dandruff and seborrheic dermatitis.

Author(s): Pierard-Franchimont C, Goffin V, Decroix J, Pierard GE.

Source: Skin Pharmacology and Applied Skin Physiology. 2002 November-December; 15(6): 434-41.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12476017

## • Adrenocortical suppression by topical application of glucocorticosteroids in infants with seborrheic dermatitis.

Author(s): Shohat M, Mimouni M, Shuper A, Varsano I.

Source: Clinical Pediatrics. 1986 April; 25(4): 209-12.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2936538

## • An open pilot study using tacrolimus ointment in the treatment of seborrheic dermatitis.

Author(s): Meshkinpour A, Sun J, Weinstein G.

Source: Journal of the American Academy of Dermatology. 2003 July; 49(1): 145-7. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12833030

#### • An unfortunate complication of self-therapy for seborrheic dermatitis.

Author(s): Burnett HW, Levine B, Smyth D.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1988 April; 41(4): 284.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2966721

## • Application of rank analysis of covariance methods to analysis of multiple anatomical regions with treatment for seborrheic dermatitis.

Author(s): Ramaswamy R, Koch GG, Amara IA.

Source: Journal of Biopharmaceutical Statistics. 1997 July; 7(3): 403-16.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=9252833

## • Association of Pityrosporum orbiculare (Malassezia furfur) with seborrheic dermatitis in patients with acquired immunodeficiency syndrome (AIDS).

Author(s): Groisser D, Bottone EJ, Lebwohl M.

Source: Journal of the American Academy of Dermatology. 1989 May; 20(5 Pt 1): 770-3. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2523907

#### • Atopic and seborrheic dermatitis: practical management.

Author(s): David TJ, Devlin J, Ewing CI.

Source: Pediatrician. 1991; 18(3): 211-7. Review.

#### Atopic, contact, and seborrheic dermatitis in adolescents.

Author(s): Lee DJ, Eichenfield LF.

Source: Adolescent Medicine (Philadelphia, Pa.). 2001 June; 12(2): Vi, 269-83. Review. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11404201

#### Benzoyl peroxide in seborrheic dermatitis.

Author(s): Bonnetblanc JM, Bernard P.

Source: Archives of Dermatology. 1986 July; 122(7): 752.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2942114

#### Biotin recycling impairment in phenylketonuric children with seborrheic dermatitis.

Author(s): Schulpis KH, Nyalala JO, Papakonstantinou ED, Leondiadis L, Livaniou E, Ithakisios D, Georgala S.

Source: International Journal of Dermatology. 1998 December; 37(12): 918-21.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=9888332

#### • Blepharitis associated with acne rosacea and seborrheic dermatitis.

Author(s): McCulley JP, Dougherty JM.

Source: International Ophthalmology Clinics. 1985 Spring; 25(1): 159-72.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=3156100

# • Blood levels of vitamin E, polyunsaturated fatty acids of phospholipids, lipoperoxides and glutathione peroxidase in patients affected with seborrheic dermatitis.

Author(s): Passi S, Morrone A, De Luca C, Picardo M, Ippolito F.

Source: Journal of Dermatological Science. 1991 May; 2(3): 171-8.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=1831657

## • CD4+ T-lymphocytopenia, Kaposi's sarcoma, HHV-8 infection, severe seborrheic dermatitis, and onychomycosis in a homosexual man without HIV infection.

Author(s): Garcia-Silva J, Almagro M, Pena C, Lopez Calvo S, Castro A, Soriano V, Fonseca E.

Source: International Journal of Dermatology. 1999 March; 38(3): 231-3.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10208627

## • Cell-mediated immune responses to Malassezia furfur serovars A, B and C in patients with pityriasis versicolor, seborrheic dermatitis and controls.

Author(s): Ashbee HR, Ingham E, Holland KT, Cunliffe WJ.

Source: Experimental Dermatology. 1994 June; 3(3): 106-12.

#### • Ciclopirox gel for seborrheic dermatitis of the scalp.

Author(s): Aly R, Katz HI, Kempers SE, Lookingbill DP, Lowe N, Menter A, Morman M, Savin RC, Wortzman M.

Source: International Journal of Dermatology. 2003 September; 42 Suppl 1: 19-22.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12895183

## • Ciclopiroxolamine cream for treating seborrheic dermatitis: a double-blind parallel group comparison.

Author(s): Unholzer A, Varigos G, Nicholls D, Schinzel S, Nietsch KH, Ulbricht H, Korting HC.

Source: Infection. 2002 December; 30(6): 373-6.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12478328

## • Concomitant psoriasis, seborrheic dermatitis, and disseminated cutaneous histoplasmosis in a patient infected with human immunodeficiency virus.

Author(s): Chaker MB, Cockerell CJ.

Source: Journal of the American Academy of Dermatology. 1993 August; 29(2 Pt 2): 311-3.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=8340505

## • Correlation of Pityosporum ovale density with clinical severity of seborrheic dermatitis as assessed by a simplified technique.

Author(s): Heng MC, Henderson CL, Barker DC, Haberfelde G.

Source: Journal of the American Academy of Dermatology. 1990 July; 23(1): 82-6.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=1694869

#### • Cradle cap.

Author(s): Steward M.

Source: Community Outlook. 1990 March 14; : 18. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2138530

#### Dandruff and seborrheic dermatitis.

Author(s): Eyre RW, Burton CS, Callaway JL.

Source: N C Med J. 1984 December; 45(12): 789-90. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=6239981

#### Dermacase. Annular seborrheic dermatitis.

Author(s): Enta T.

Source: Can Fam Physician. 1997 December; 43: 2119, 2125. No Abstract Available.

#### • Differential diagnosis of seborrheic dermatitis.

Author(s): Williams ML.

Source: Pediatrics in Review / American Academy of Pediatrics. 1986 January; 7(7): 204-11. Review.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2970064

#### • Does treatment with topical metronidazole improve seborrheic dermatitis?

Author(s): Iudica AC.

Source: The Journal of Family Practice. 2001 June; 50(6): 492.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11401733

#### • Double-blind treatment of seborrheic dermatitis with 2% ketoconazole cream.

Author(s): Skinner RB Jr, Noah PW, Taylor RM, Zanolli MD, West S, Guin JD, Rosenberg EW.

Source: Journal of the American Academy of Dermatology. 1985 May; 12(5 Pt 1): 852-6. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=3159759

# • Effective treatment of seborrheic dermatitis using a low dose, oral homeopathic medication consisting of potassium bromide, sodium bromide, nickel sulfate, and sodium chloride in a double-blind, placebo-controlled study.

Author(s): Smith SA, Baker AE, Williams JH.

Source: Alternative Medicine Review : a Journal of Clinical Therapeutic. 2002 February; 7(1): 59-67.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11896746

## • Efficacy of topical application of glucocorticosteroids compared with eosin in infants with seborrheic dermatitis.

Author(s): Shohat M, Mimouni M, Varsano I.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1987 July; 40(1): 67-8.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2444395

## • Erythema with features of seborrheic dermatitis and lupus erythematosus associated with systemic 5-fluorouracil.

Author(s): Dudley K, Micetich K, Massa MC.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1987 January; 39(1): 64-6.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2948777

#### Erythrasma and seborrheic dermatitis of the groin.

Author(s): Marinella MA.

Source: American Family Physician. 1995 November 15; 52(7): 2012.

#### • Essential fatty acids in infantile seborrheic dermatitis.

Author(s): Tollesson A, Frithz A, Berg A, Karlman G.

Source: Journal of the American Academy of Dermatology. 1993 June; 28(6): 957-61. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=8496460

#### • Facial seborrheic dermatitis treated with fluconazole 2% shampoo.

Author(s): Rigopoulos D, Katsambas A, Antoniou C, Theocharis S, Stratigos J. Source: International Journal of Dermatology. 1994 February; 33(2): 136-7. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=A bstract&list\_uids=8157400

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Author(s): Nakayama J.

Source: European Journal of Dermatology : Ejd. 2000 October-November; 10(7): 528-32. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11056423

#### • Generalized seborrheic dermatitis in an immunodeficient newborn.

Author(s): Bykowsky MJ.

Source: Cutis; Cutaneous Medicine for the Practitioner. 2002 December; 70(6): 324; Author Reply 324.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12502120

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Author(s): Kim HJ, Lim YS, Choi HY, Myung KB.

Source: Cutis; Cutaneous Medicine for the Practitioner. 2001 January; 67(1): 52-4. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11204605

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Author(s): Perlman HH.

Source: Ann Allergy. 1965 December; 23(12): 583-8. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4221593

## • Histopathologic differentiation of eczematous dermatitides from psoriasis and seborrheic dermatitis.

Author(s): Ackerman AB.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1977 November; 20(5): 619-23. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=144590

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Author(s): Cram DL.

Source: Med Times. 1980 March; 108(3): 74-6. No Abstract Available.

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Author(s): Hackney VC, Norins AL.

Source: Postgraduate Medicine. 1968 February; 43(2): 242-3.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=A

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Author(s): Silva V, Fischman O, de Camargo ZP.

Source: Mycopathologia. 1997; 139(2): 79-85.

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Author(s): Ashbee HR, Fruin A, Holland KT, Cunliffe WJ, Ingham E.

Source: Experimental Dermatology. 1994 October; 3(5): 227-33.

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Author(s): Jeanneau R, Goodyer P, Kaplan BS.

Source: The Journal of Pediatrics. 1978 July; 93(1): 148-9.

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Author(s): Kieffer M, Bergbrant IM, Faergemann J, Jemec GB, Ottevanger V, Stahl Skov P, Svejgaard E.

Source: Journal of the American Academy of Dermatology. 1990 May; 22(5 Pt 1): 739-42. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=1693386

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Author(s): Selden ST.

Source: American Family Physician. 1996 May 15; 53(7): 2278, 2282.

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Author(s): Oranje AP, van Joost T, van Reede EC, Vuzevski VD, Dzoljic-Danilovic G, ten Kate FJ, Stolz E.

Source: Dermatologica. 1986; 172(4): 191-5.

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#### • Infantile seborrheic dermatitis: an approach to cradle cap.

Author(s): Janniger CK.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1993 April; 51(4): 233-5. Review. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=8477601

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Author(s): Menni S, Piccinno R, Baietta S, Ciuffreda A, Scotti L.

Source: Pediatric Dermatology. 1989 March; 6(1): 13-5.

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Author(s): Dowlati B, Firooz A, Khamesipour A, Lotfi M, Stuart CA, Smith EB, Larijani B, Dowlati Y.

Source: Archives of Dermatology. 1998 August; 134(8): 1043-5.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=9722747

## • Is there a relation between risk groups or initial CD4 T cell counts and prevalence of seborrheic dermatitis in HIV-infected patients?

Author(s): Schaub NA, Drewe J, Sponagel L, Gilli L, Courvoisier S, Gyr N, Rufli T, Battegay M, Itin P.

Source: Dermatology (Basel, Switzerland). 1999; 198(2): 126-9.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10325457

#### Is topical metronidazole effective in seborrheic dermatitis? A double-blind study.

Author(s): Koca R, Altinyazar HC, Esturk E.

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Author(s): Friedlander SF, West A, Eichenfield LF.

Source: Clinical Pediatrics. 1996 October; 35(10): 531-4.

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Author(s): Stratigos JD, Antoniou C, Katsambas A, Bohler K, Fritsch P, Schmolz A, Michaelidis D, De Beule K.

Source: Journal of the American Academy of Dermatology. 1988 November; 19(5 Pt 1): 850-3.

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Author(s): Pierard GE, Pierard-Franchimont C, Van Cutsem J, Rurangirwa A, Hoppenbrouwers ML, Schrooten P.

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Author(s): Parish LC.

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Author(s): Christodoulou GN, Georgala S, Vareltzides A, Catsarou A.

Source: Psychiatr J Univ Ott. 1983 March; 8(1): 27-9. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=6223331

#### • Malassezia furfur in infantile seborrheic dermatitis.

Author(s): Tollesson A, Frithz A, Stenlund K.

Source: Pediatric Dermatology. 1997 November-December; 14(6): 423-5.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=9436835

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Author(s): Pechere M, Krischer J, Remondat C, Bertrand C, Trellu L, Saurat JH.

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Author(s): Faergemann J.

Source: American Journal of Clinical Dermatology. 2000 March-April; 1(2): 75-80. Review.

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Author(s): Leung AK.

Source: The Western Journal of Medicine. 1985 April; 142(4): 558.

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## • Occlusive tar extract therapy for recalcitrant psoriasis and seborrheic dermatitis of the scalp.

Author(s): Garcia RL, Miller JD, Miller WN.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1978 July; 22(1): 90-1.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=149652

#### • Oral terbinafine for the treatment of seborrheic dermatitis in adults.

Author(s): Cassano N, Amoruso A, Loconsole F, Vena GA.

Source: International Journal of Dermatology. 2002 November; 41(11): 821-2.

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Author(s): Crutchfield CE 3rd.

Source: Cutis; Cutaneous Medicine for the Practitioner. 2002 October; 70(4): 207-8.

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Author(s): Ruiz-Maldonado R, Lopez-Matinez R, Perez Chavarria EL, Rocio Castanon L, Tamayo L.

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#### • Pityrosporum, ketoconazole, and seborrheic dermatitis.

Author(s): Wishner AJ, Teplitz ED, Goodman DS.

Source: Journal of the American Academy of Dermatology. 1987 July; 17(1): 140-1.

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Author(s): Brenner S, Horwitz C.

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• Prediagnostic human T lymphotropic virus type I provirus loads were highest in Jamaican children who developed seborrheic dermatitis and severe anemia.

Author(s): Maloney EM, Nagai M, Hisada M, Soldan SS, Goebel PB, Carrington M, Sawada T, Brennan MB, Cranston B, Hanchard B, Jacobson S.

Source: The Journal of Infectious Diseases. 2004 January 1; 189(1): 41-5. Epub 2003 December 31.

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 Predictive value of seborrheic dermatitis and other common dermatoses for HIV infection in Bamako, Mali.

Author(s): Mahe A, Simon F, Coulibaly S, Tounkara A, Bobin P.

Source: Journal of the American Academy of Dermatology. 1996 June; 34(6): 1084-6.

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Author(s): Mimouni K, Mukamel M, Zeharia A, Mimouni M.

Source: The Journal of Pediatrics. 1995 November; 127(5): 744-6.

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Author(s): Faergemann J.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1988 July; 42(1): 69-71.

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Author(s): Stone OJ.

Source: Medical Hypotheses. 1989 December; 30(4): 277-80.

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• Quantitative microbiology of the scalp in non-dandruff, dandruff, and seborrheic dermatitis.

Author(s): McGinley KJ, Leyden JJ, Marples RR, Kligman AM.

Source: The Journal of Investigative Dermatology. 1975 June; 64(6): 401-5.

• Quantitative skin cultures of Pityrosporum yeasts in patients seropositive for the human immunodeficiency virus with and without seborrheic dermatitis.

Author(s): Wikler JR, Nieboer C, Willemze R.

Source: Journal of the American Academy of Dermatology. 1992 July; 27(1): 37-9.

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• Randomized, open-labeled, non-inferiority study between ciclopiroxolamine 1% cream and ketoconazole 2% foaming gel in mild to moderate facial seborrheic dermatitis.

Author(s): Chosidow O, Maurette C, Dupuy P.

Source: Dermatology (Basel, Switzerland). 2003; 206(3): 233-40.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12673081

• Relation between skin temperature and location of facial lesions in seborrheic dermatitis.

Author(s): Hale EK, Bystryn JC.

Source: Archives of Dermatology. 2000 April; 136(4): 559-60.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10768666

• Safety and efficacy of clocortolone pivalate 0.1 percent cream in the treatment of atopic dermatitis, contact dermatitis, and seborrheic dermatitis.

Author(s): Nierman MM.

Source: Cutis; Cutaneous Medicine for the Practitioner. 1981 June; 27(6): 670-1. Review. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=6453703

• Scabies of the scalp mimicking seborrheic dermatitis in immunocompromised patients.

Author(s): Duran C, Tamayo L, de la Luz Orozco M, Ruiz-Maldonado R.

Source: Pediatric Dermatology. 1993 June; 10(2): 136-8.

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Author(s): Skinner RB Jr, Zanolli MD, Noah PW, Rosenberg EW.

Source: Journal of the American Academy of Dermatology. 1986 January; 14(1): 147-8. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2936769

• Seborrheic dermatitis and atopic eczema in human immunodeficiency virus infection.

Author(s): Froschl M, Land HG, Landthaler M.

Source: Semin Dermatol. 1990 September; 9(3): 230-2. Review.

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#### • Seborrheic dermatitis and butterfly rash in AIDS.

Author(s): Eisenstat BA, Wormser GP.

Source: The New England Journal of Medicine. 1984 July 19; 311(3): 189.

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#### • Seborrheic dermatitis and daylight.

Author(s): Verschoore M, Ortonne JP.

Source: Acta Dermato-Venereologica. 1993 October; 73(5): 396.

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Author(s): Maietta G, Rongioletti F, Rebora A.

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http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=1685840

## • Seborrheic dermatitis and HIV infection. Qualitative analysis of skin surface lipids in men seropositive and seronegative for HIV.

Author(s): Vidal C, Girard PM, Dompmartin D, Bosson JL, Mettra C, Groslambert P, Coulaud JP, Amblard P.

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Author(s): Clift DC, Dodd HJ, Kirby JD, Midgley G, Noble WC.

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#### • Seborrheic dermatitis and rosacea.

Author(s): Richardson DP.

Source: Compr Ther. 1981 January; 7(1): 57-60. No Abstract Available.

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Author(s): Mahe A, Boulais C, Blanc L, Keita S, Bobin P.

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#### • Seborrheic dermatitis in acquired immunodeficiency syndrome.

Author(s): Marino CT, McDonald E, Romano JF.

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Author(s): Binder RL, Jonelis FJ.

Source: Archives of Dermatology. 1983 June; 119(6): 473-5.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=6134496

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Author(s): Massone L, Borghi S, Pestarino A, Piccini R, Solari G, Casini Lemmi M, Isola V.

Source: Chemioterapia. 1988 April; 7(2): 109-12.

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Author(s): Mathes BM, Douglass MC.

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#### Seborrheic dermatitis of infants: treatment with biotin injections for the nursing mother.

Author(s): Nisenson A.

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Author(s): Goldstein MI.

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Author(s): Pandya AG.

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Author(s): Pierard GE.

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## • Seborrheic dermatitis, increased sebum excretion, and Parkinson's disease: a survey of (im)possible links.

Author(s): Mastrolonardo M, Diaferio A, Logroscino G.

Source: Medical Hypotheses. 2003 June; 60(6): 907-11.

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Author(s): Gupta AK, Bluhm R, Cooper EA, Summerbell RC, Batra R.

Source: Dermatologic Clinics. 2003 July; 21(3): 401-12. Review.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12956195

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Author(s): Janniger CK, Schwartz RA.

Source: American Family Physician. 1995 July; 52(1): 149-55, 159-60. Review. Erratum In: Am Fam Physician 1995 September 1; 52(3): 782.

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Author(s): Webster G.

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Author(s): Mauro J.

Source: American Family Physician. 1977 March; 15(3): 116-7.

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Author(s): Levan NE.

Source: West Med Med J West. 1966 April; 7(4): Suppl 2: 17-9. No Abstract Available. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4222971

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Author(s): Binder RL, Jonelis FJ.

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#### • Seborrheic dermatitis: practical therapy.

Author(s): Fishman HC.

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#### • Seborrheic dermatitis--hyperreactive inflammation to saprophytes.

Author(s): Stone OJ.

Source: Dermatol Int. 1968 January-March; 7(1): 14-6. No Abstract Available.

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Author(s): Cockerell CJ.

Source: Clinics in Dermatology. 1991 January-March; 9(1): 49-51. Review.

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#### • Seborrheic dermatitis-like eruption caused by cimetidine.

Author(s): Kanwar AJ, Majid A, Garg MP, Singh G.

Source: Archives of Dermatology. 1981 February; 117(2): 65-6.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=A

bstract&list\_uids=6451198

## • Severe dermatologic toxicity from 5-fluorouracil in the presence of seborrheic dermatitis.

Author(s): Vukelja SJ, James WD, Weiss RB.

Source: International Journal of Dermatology. 1989 June; 28(5): 353-4.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2526792

## • Skin surface lipids in HIV sero-positive and HIV sero-negative patients affected with seborrheic dermatitis.

Author(s): Passi S, Picardo M, Morrone A, De Luca C, Ippolito F.

Source: Journal of Dermatological Science. 1991 March; 2(2): 84-91.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=1829629

#### Skin surface lipids in HIV-positive patients with and without seborrheic dermatitis.

Author(s): Ostlere LS, Taylor CR, Harris DW, Rustin MH, Wright S, Johnson M.

Source: International Journal of Dermatology. 1996 April; 35(4): 276-9.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=8786186

#### • Squamometry in seborrheic dermatitis.

Author(s): Pierard-Franchimont C, Willemaers V, Fraiture AL, Pierard GE.

Source: International Journal of Dermatology. 1999 September; 38(9): 712-5.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10517693

#### SUNCT syndrome and seborrheic dermatitis associated with craneosynostosis.

Author(s): Moris G, Ribacoba R, Solar DN, Vidal JA.

Source: Cephalalgia: an International Journal of Headache. 2001 March; 21(2): 157-9.

#### Surgical management of an uncommon complication of seborrheic dermatitis.

Author(s): Flandermeyer KL, Brauner GJ.

Source: J Dermatol Surg Oncol. 1978 October; 4(10): 768-9. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=151697

#### • The adjunctive use of fluocinolone acetonide solution in seborrheic dermatitis.

Author(s): Basile OJ.

Source: Curr Ther Res Clin Exp. 1968 June; 10(6): 270-5. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4233108

## • The frequency of common skin conditions in preschool-aged children in Australia: seborrheic dermatitis and pityriasis capitis (cradle cap).

Author(s): Foley P, Zuo Y, Plunkett A, Merlin K, Marks R.

Source: Archives of Dermatology. 2003 March; 139(3): 318-22.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=12622623

#### • The pathogenic role of microbes in seborrheic dermatitis.

Author(s): Skinner RB Jr, Noah PW, Zanolli MD, Rosenberg EW.

Source: Archives of Dermatology. 1986 January; 122(1): 16-7.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2935085

#### • The primary histologic lesion of seborrheic dermatitis and psoriasis.

Author(s): Pinkus H, Mehregan AH.

Source: The Journal of Investigative Dermatology. 1966 January; 46(1): 109-16.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4222023

#### • The red face: seborrheic dermatitis.

Author(s): Rebora A, Rongioletti F.

Source: Clinics in Dermatology. 1993 April-June; 11(2): 243-51. Review.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=8348438

#### • The role of Pityrosporum ovale in seborrheic dermatitis.

Author(s): Bergbrant IM, Faergemann J.

Source: Semin Dermatol. 1990 December; 9(4): 262-8. Review.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2149500

#### • The safety of ketoconazole shampoo for infantile seborrheic dermatitis.

Author(s): Brodell RT, Patel S, Venglarcik JS, Moses D, Gemmel D.

Source: Pediatric Dermatology. 1998 September-October; 15(5): 406-7.

#### • The treatment of perioral dermatitis, acne rosacea, and seborrheic dermatitis.

Author(s): Ellis CN, Stawiski MA.

Source: The Medical Clinics of North America. 1982 July; 66(4): 819-30.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=A

bstract&list\_uids=6212726

## • Therapeutic and prophylactic effects of crude honey on chronic seborrheic dermatitis and dandruff.

Author(s): Al-Waili NS.

Source: European Journal of Medical Research. 2001 July 30; 6(7): 306-8.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11485891

## • Thyroid function investigation by means of I-131 in acne vulgaris and in seborrheic dermatitis.

Author(s): Andreassi L, Gennari C, Bencini M.

Source: Dermatologica. 1969; 139(1): 69-75. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4241479

#### • Tinea capitis masquerading as atopic or seborrheic dermatitis.

Author(s): Honig PJ, Smith LR.

Source: The Journal of Pediatrics. 1979 April; 94(4): 604-5.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=155156

#### • Tinea faciale mimicking seborrheic dermatitis in a patient with AIDS.

Author(s): Perniciaro C, Peters MS.

Source: The New England Journal of Medicine. 1986 January 30; 314(5): 315-6.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=2934634

## • Tinea versicolor with regard to seborrheic dermatitis. An epidemiological investigation.

Author(s): Faergemann J, Fredriksson T.

Source: Archives of Dermatology. 1979 August; 115(8): 966-8.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=157104

#### • Topical metronidazole in seborrheic dermatitis--a double-blind study.

Author(s): Parsad D, Pandhi R, Negi KS, Kumar B.

Source: Dermatology (Basel, Switzerland). 2001; 202(1): 35-7.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11244226

#### • Topical pimecrolimus in the treatment of seborrheic dermatitis.

Author(s): Brownell I, Quan LT, Hsu S.

Source: Dermatology Online Journal [electronic Resource]. 2003 August; 9(3): 13.

#### • Treatment of psoriasis, lichen planus, and seborrheic dermatitis.

Author(s): Demis DJ, Gass HH.

Source: Mod Treat. 1965 September; 2(5): 873-88. Review. No Abstract Available.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4220629

## • Treatment of scalp seborrheic dermatitis and psoriasis with an ointment of 40% urea and 1% bifonazole.

Author(s): Shemer A, Nathansohn N, Kaplan B, Weiss G, Newman N, Trau H.

Source: International Journal of Dermatology. 2000 July; 39(7): 532-4.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10940120

#### • Treatment of seborrheic dermatitis in the Negro scalp.

Author(s): Pierce HE.

Source: Journal of the National Medical Association. 1966 September; 58(5): 345-6.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4224083

#### • Treatment of seborrheic dermatitis with biotin and vitamin B complex.

Author(s): Nisenson A, Barness LA.

Source: The Journal of Pediatrics. 1972 September; 81(3): 630-1.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=4261960

#### • Treatment of seborrheic dermatitis.

Author(s): Johnson BA, Nunley JR.

Source: American Family Physician. 2000 May 1; 61(9): 2703-10, 2713-4.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10821151

## • Treatment with bifonazole shampoo for seborrhea and seborrheic dermatitis: a randomized, double-blind study.

Author(s): Segal R, David M, Ingber A, Lurie R, Sandbank M.

Source: Acta Dermato-Venereologica. 1992 November; 72(6): 454-5.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=1362843

## • Zinc status in HIV-infected patients: relation to the presence or absence of seborrheic dermatitis.

Author(s): Basset-Seguin N, Sotto A, Guillot B, Jourdan J, Guilhou JJ.

Source: Journal of the American Academy of Dermatology. 1998 February; 38(2 Pt 1): 276-8.

#### CHAPTER 2. NUTRITION AND SEBORRHEIC DERMATITIS

#### Overview

In this chapter, we will show you how to find studies dedicated specifically to nutrition and seborrheic dermatitis.

#### Finding Nutrition Studies on Seborrheic Dermatitis

The National Institutes of Health's Office of Dietary Supplements (ODS) offers a searchable bibliographic database called the IBIDS (International Bibliographic Information on Dietary Supplements; National Institutes of Health, Building 31, Room 1B29, 31 Center Drive, MSC 2086, Bethesda, Maryland 20892-2086, Tel: 301-435-2920, Fax: 301-480-1845, E-mail: ods@nih.gov). The IBIDS contains over 460,000 scientific citations and summaries about dietary supplements and nutrition as well as references to published international, scientific literature on dietary supplements such as vitamins, minerals, and botanicals.<sup>7</sup> The IBIDS includes references and citations to both human and animal research studies.

As a service of the ODS, access to the IBIDS database is available free of charge at the following Web address: http://ods.od.nih.gov/databases/ibids.html. After entering the search area, you have three choices: (1) IBIDS Consumer Database, (2) Full IBIDS Database, or (3) Peer Reviewed Citations Only.

Now that you have selected a database, click on the "Advanced" tab. An advanced search allows you to retrieve up to 100 fully explained references in a comprehensive format. Type "seborrheic dermatitis" (or synonyms) into the search box, and click "Go." To narrow the search, you can also select the "Title" field.

<sup>&</sup>lt;sup>7</sup> Adapted from http://ods.od.nih.gov. IBIDS is produced by the Office of Dietary Supplements (ODS) at the National Institutes of Health to assist the public, healthcare providers, educators, and researchers in locating credible, scientific information on dietary supplements. IBIDS was developed and will be maintained through an interagency partnership with the Food and Nutrition Information Center of the National Agricultural Library, U.S. Department of Agriculture.

The following information is typical of that found when using the "Full IBIDS Database" to search for "seborrheic dermatitis" (or a synonym):

• A randomised, single-blind, single-centre clinical trial to evaluate comparative clinical efficacy of shampoos containing ciclopirox olamine (1.5%) and salicylic acid (3%), or ketoconazole (2%, Nizoral) for the treatment of dandruff/seborrhoeic dermatitis.

Author(s): PPD Development, Chelmsford, Essex, UK.

Source: Squire, R A Goode, K J-Dermatolog-Treat. 2002 June; 13(2): 51-60 0954-6634

 Dandruff: a condition characterized by decreased levels of intercellular lipids in scalp stratum corneum and impaired barrier function.

Author(s): Unilever Research, Colworth House Laboratory, Sharnbrook, Bedfordshire MK44 1LQ, UK. Clive.Harding@unilever.com

Source: Harding, C R Moore, A E Rogers, J S Meldrum, H Scott, A E McGlone, F P Arch-Dermatol-Res. 2002 July; 294(5): 221-30 0340-3696

Is seborrhea a sign of autonomic impairment in Parkinson's disease?

Author(s): Parkinson's Disease and Movement Disorders' Centre, Department of Neurology, IRCCS C. Mondino, University of Pavia, Italy.

Source: Martignoni, E Godi, L Pacchetti, C Berardesca, E Vignoli, G P Albani, G Mancini, F Nappi, G J-Neural-Transm. 1997; 104(11-12): 1295-304

• New strategies in dandruff treatment: growth control of Malassezia ovalis.

Author(s): Istituto di Clinica Dermosifilopatica, Facolta di Medicina e Chirurgia, Seconda Universita di Napoli, Italia. piergior.catalanotti@unina2.it

Source: Baroni, A De Rosa, R De Rosa, A Donnarumma, G Catalanotti, P Dermatology. 2000; 201(4): 332-6 1018-8665

• The effect of 2 combined oral Contraceptives containing either drospirenone or cyproterone acetate on acne and seborrhea.

Author(s): Department of Dermatology, University Medical Center Utrecht, Netherlands.

Source: van Vloten, W A van Haselen, C W van Zuuren, E J Gerlinger, C Heithecker, R Cutis. 2002 April; 69(4 Suppl): 2-15 0011-4162

• Treatment of dandruff with 5% tea tree oil shampoo.

Author(s): Department of Dermatology, Royal Prince Alfred Hospital, Camperdown, NSW, Australia.

Source: Satchell, A C Saurajen, A Bell, C Barnetson, R S J-Am-Acad-Dermatol. 2002 December; 47(6): 852-5 0190-9622

• Use of etretinate for treatment of primary keratinization disorders (idiopathic seborrhea) in cocker spaniels, west highland white terriers, and basset hounds.

Author(s): Veterinary Medical Teaching Hospital, School of Veterinary Medicine, University of California, Davis 95616.

Source: Power, H T Ihrke, P J Stannard, A A Backus, K Q J-Am-Vet-Med-Assoc. 1992 August 1; 201(3): 419-29 0003-1488

Nutrition

#### **Federal Resources on Nutrition**

In addition to the IBIDS, the United States Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA) provide many sources of information on general nutrition and health. Recommended resources include:

- healthfinder®, HHS's gateway to health information, including diet and nutrition: http://www.healthfinder.gov/scripts/SearchContext.asp?topic=238&page=0
- The United States Department of Agriculture's Web site dedicated to nutrition information: www.nutrition.gov
- The Food and Drug Administration's Web site for federal food safety information: www.foodsafety.gov
- The National Action Plan on Overweight and Obesity sponsored by the United States Surgeon General: http://www.surgeongeneral.gov/topics/obesity/
- The Center for Food Safety and Applied Nutrition has an Internet site sponsored by the Food and Drug Administration and the Department of Health and Human Services: http://vm.cfsan.fda.gov/
- Center for Nutrition Policy and Promotion sponsored by the United States Department of Agriculture: http://www.usda.gov/cnpp/
- Food and Nutrition Information Center, National Agricultural Library sponsored by the United States Department of Agriculture: http://www.nal.usda.gov/fnic/
- Food and Nutrition Service sponsored by the United States Department of Agriculture: http://www.fns.usda.gov/fns/

#### **Additional Web Resources**

A number of additional Web sites offer encyclopedic information covering food and nutrition. The following is a representative sample:

- AOL: http://search.aol.com/cat.adp?id=174&layer=&from=subcats
- Family Village: http://www.familyvillage.wisc.edu/med\_nutrition.html
- Google: http://directory.google.com/Top/Health/Nutrition/
- Healthnotes: http://www.healthnotes.com/
- Open Directory Project: http://dmoz.org/Health/Nutrition/
- Yahoo.com: http://dir.yahoo.com/Health/Nutrition/
- WebMD®Health: http://my.webmd.com/nutrition
- WholeHealthMD.com: http://www.wholehealthmd.com/reflib/0,1529,00.html

The following is a specific Web list relating to seborrheic dermatitis; please note that any particular subject below may indicate either a therapeutic use, or a contraindication (potential danger), and does not reflect an official recommendation:

#### Vitamins

#### Folic Acid

Source: Healthnotes, Inc.; www.healthnotes.com

#### Vitamin A

Source: Prima Communications, Inc.www.personalhealthzone.com

#### Vitamin B12

Source: Healthnotes, Inc.; www.healthnotes.com

#### Vitamin B6

Source: Healthnotes, Inc.; www.healthnotes.com

#### • Minerals

#### **Biotin**

Source: Healthnotes, Inc.; www.healthnotes.com

#### Riotin

Source: Integrative Medicine Communications; www.drkoop.com

#### **Biotin**

Source: Prima Communications, Inc.www.personalhealthzone.com

#### Vitamin H (Biotin)

Source: Integrative Medicine Communications; www.drkoop.com

#### Food and Diet

#### **Nutritional Yeast**

Source: Integrative Medicine Communications; www.drkoop.com

#### Wheat

Source: Healthnotes, Inc.; www.healthnotes.com

# CHAPTER 3. PATENTS ON SEBORRHEIC DERMATITIS

# Overview

Patents can be physical innovations (e.g. chemicals, pharmaceuticals, medical equipment) or processes (e.g. treatments or diagnostic procedures). The United States Patent and Trademark Office defines a patent as a grant of a property right to the inventor, issued by the Patent and Trademark Office.<sup>8</sup> Patents, therefore, are intellectual property. For the United States, the term of a new patent is 20 years from the date when the patent application was filed. If the inventor wishes to receive economic benefits, it is likely that the invention will become commercially available within 20 years of the initial filing. It is important to understand, therefore, that an inventor's patent does not indicate that a product or service is or will be commercially available. The patent implies only that the inventor has "the right to exclude others from making, using, offering for sale, or selling" the invention in the United States. While this relates to U.S. patents, similar rules govern foreign patents.

In this chapter, we show you how to locate information on patents and their inventors. If you find a patent that is particularly interesting to you, contact the inventor or the assignee for further information. **IMPORTANT NOTE:** When following the search strategy described below, you may discover <u>non-medical patents</u> that use the generic term "seborrheic dermatitis" (or a synonym) in their titles. To accurately reflect the results that you might find while conducting research on seborrheic dermatitis, <u>we have not necessarily excluded non-medical patents</u> in this bibliography.

## **Patents on Seborrheic Dermatitis**

By performing a patent search focusing on seborrheic dermatitis, you can obtain information such as the title of the invention, the names of the inventor(s), the assignee(s) or the company that owns or controls the patent, a short abstract that summarizes the patent, and a few excerpts from the description of the patent. The abstract of a patent tends to be more technical in nature, while the description is often written for the public. Full patent descriptions contain much more information than is presented here (e.g. claims, references, figures, diagrams, etc.). We will tell you how to obtain this information later in the chapter.

<sup>&</sup>lt;sup>8</sup>Adapted from the United States Patent and Trademark Office: http://www.uspto.gov/web/offices/pac/doc/general/whatis.htm.

The following is an example of the type of information that you can expect to obtain from a patent search on seborrheic dermatitis:

# Anti-dandruff and conditioning shampoos containing polyalkylene glycols and cationic polymers

Inventor(s): Dunlop; David Scott (Mason, OH), Guskey; Susan Marie (Montgomery, OH), Leyba; Vicente Eduardo (Los Ruices, VE), Royce; Douglas Allan (Aurora, IN)

Assignee(s): The Procter & Gamble Company (cincinnati, Oh)

Patent Number: 6,451,300 Date filed: April 25, 2000

Abstract: Disclosed are shampoo compositions that provide a superior combination of anti-dandruff efficacy and conditioning, and a method of cleansing and conditioning the hair comprising applying to the hair and scalp an effective amount of said compositions. The anti-dandruff and conditioning shampoos comprise: (A) from about 5% to about 50%, by weight of the composition, of an anionic surfactant; (B) from about 0.01% to about 10%, by weight of the composition, of a non-volatile conditioning agent; (C) from about 0.1% to about 4%, by weight of the composition, of an anti-dandruff particulate; (D) from about 0.02% to about 5%, by weight of the composition, of at least one cationic polymer; (E) from 0.005% to about 1.5%, by weight of the composition, of a polyalkylene glycol corresponding to the formula: H(OCH.sub.2 --CHR).sub.n --OH, (i) wherein R is selected from the group consisting of hydrogen, methyl and mixtures thereof, (ii) wherein n is an integer having an average value from about 1,500 to about 120,000; and (F) water.

Excerpt(s): The present invention relates to shampoo compositions which provide a superior combination of anti-dandruff efficacy and conditioning. These compositions contain anionic surfactants, conditioning agents, anti-dandruff particulates, cationic polymers, polyalkylene glycols, and water. Shampoo compositions comprising various combinations of detersive surfactants and conditioning agents, especially silicone conditioning agents, are known in the art and are commercially available. Many of these compositions have been found to provide excellent hair cleansing and conditioning performance. For example, Pantene.RTM. Shampoo Plus Pro-Vitamin Conditioner-in-One formulas which contain anionic surfactants, a cationic polymer and silicone conditioning agents provide excellent cleaning, conditioning and hair feel benefits upon application to hair. Anti-dandruff shampoos are also well known in the art and are also commercially available. Anti-dandruff shampoos typically incorporate an anti-dandruff active and detersive surfactants. Among the preferred type of anti-dandruff agents are particulate, crystalline anti-dandruff agents, such as sulfur, selenium disulfide and heavy metal salts of pyridinethione. Soluble anti-dandruff agents, such as ketoconazole, are also known in the art.

Web site: http://www.delphion.com/details?pn=US06451300\_\_

# Anti-dandruff shampoo

Inventor(s): Beilharz; Helmut (Shriesheim, DE), Riede; Urs (Freiburg St. Georgen, DE),

Seubert; Bernard (Edingen-Neckarhausen, DE)

Assignee(s): Rutgerswerke Aktiengesellschaft (de)

Patent Number: 5,494,675

Date filed: September 11, 1992

Abstract: A method of treating **dandruff** in warm-blooded animals comprising applying to the hair of a warm-blooded animal an anti-dandruff effective amount of an alkali metal or ammonium salt of a low molecular weight huminate with a mean molecular weight of 1000 with a range of 300 to 1500 and a method of treating or preventing **dandruff**.

Excerpt(s): Dandruff is a wide-spread cosmetic problem, and to fight it a plurality of active substances have been proposed and employed. Probably the best and most successful anti-dandruff agent is zinc pyrithion, known from U.S. Pat. No. 3,236,733 as an ecologically and physiologically safe substance which is added to shampoo in a simple manner. It spreads on the scalp as the hair is being washed and is fixed so that an effective amount remains on the scalp after the hair wash. However, anti-dandruff preparations or shampoos which contain pyrithion-containing compounds have the disadvantage that they stimulate the scalp to grease up again more [Cf. Seifen-Oele-Fette-Wachse, Vol. 108 (1982), p 471-475]. Attempts have been made to minimize this side effect by reducing the amount of active ingredients and by adding additional active ingredients, particularly film-forming fatty ethers, so-called re-greasers. It is an object of the invention to provide shampoos with a good anti-dandruff activity without side effects so that the anti-dandruff treatment occurs with the washing of the hair.

Web site: http://www.delphion.com/details?pn=US05494675\_\_\_

### Anti-dandruff shampoos with particulate active agent and cationic polymer

Inventor(s): Coffindaffer; Timothy W. (Loveland, OH), Cothran; Philip E. (Loveland, OH

OH), Gauthier; Thomas F. (Milford, OH)

Assignee(s): The Procter & Gamble Company (cincinnati, Oh)

Patent Number: 5,624,666 Date filed: January 20, 1995

Abstract: Provided is a anti-dandruff shampoo composition comprising: (a) from about 8% to about 40%, by weight, of anionic detersive surfactant; (b) from about 0.1% to about 5%, by weight, of particulate anti-dandruff agent having an average particle size of from about 0.35 microns to about 5 microns; (c) from about 0.01% to about 1.0%, by weight, of a stabilizing agent for said anti-dandruff agent, said stabilizing agent being a soluble cationic polymer; (d)from about 50% to about 91.89%, by weight, water; wherein said shampoo composition is substantially free of suspending agents selected from the group consisting of crystalline suspending agents and anionic, nonionic, and amphoteric polymeric suspending agents. Also provided is a process used for making the present compositions wherein said particulate anti-dandruff agent and said cationic polymer are admixed in water in the presence of anionic detersive surfactant.

Excerpt(s): The present invention relates to shampoo compositions containing particulate anti-dandruff agents. In particular, the present invention relates to shampoo

compositions containing a particulate anti-dandruff agent and a cationic polymer. Shampoo compositions for cleaning the hair which also contain anti-dandruff agents are well known. Among the preferred types of anti-dandruff agents are particulate, crystalline anti-dandruff agents, such as sulfur, selenium disulfide, and heavy metal salts of pyridinethione. In order for these types of shampoos to be effective and to provide a consistent level of performance, without requiring vigorous shaking of the package in which they are contained, it is conventional practice to suspend them in the composition with the aid of a suspending agent. Since shampoos are likely to remain on shelves or in storage for long periods of time, it is important for the suspending agents to keep the particulate anti-dandruff agents well suspended for relatively long periods of time. The suspending agents which have become preferred for suspension of particulate anti-dandruff agents are those which form a crystalline network in the shampoo when the shampoo is stationary, but which allow the composition to readily flow when shear is applied, such as when a user pours it out of a bottle. Examples of such suspending agents include ethylene glycol distearate and N, N- di- (hydrogenated tallow) amido benzoic acid. Crystalline suspending agents are currently the preferred method for suspending particulate anti-dandruff agents in the marketplace. Other suspending agents which are known include hydrophilic polymeric thickening agents such as cellulosic gums and acrylic acid/acrylate polymers, the latter of which are commonly referred to as carbomers. Although these materials are effective for suspending particulate matter, at higher levels they tend to impart an undesirable, slimy feel.

Web site: http://www.delphion.com/details?pn=US05624666\_\_

#### Chitin extract for treatment of skin disease

Inventor(s): Brenner; Sarah (Tel-Aviv, IL), Segal; Esther (Tel-Aviv, IL)

Assignee(s): Ramot University Authority for Applied Research and Industrial (ramat-

aviv, Il)

Patent Number: 6,046,176 Date filed: April 24, 1998

Abstract: A pharmaceutical composition for use in the prevention of or in the treatment of infection by yeasts of the genus Malassezia comprises a chitin soluble extract (CSE), optionally together with a suitable pharmaceutical carrier. The composition is particularly useful for the treatment and prevention of **Seborrheic dermatitis**. Also described is a method for treating or preventing the **Seborrheic dermatitis** caused by yeasts of the genus Malassezia comprising the step of topically applying the pharmaceutical composition of the invention to the area infected by or susceptible to infection by the yeasts.

Excerpt(s): The present invention relates to pharmaceutical and cosmetic compositions based on a chitin extract for use in the prevention and treatment of skin diseases in general, and **Seborrheic dermatitis** in particular. The invention also relates to a method of treatment using such compositions. One of the more widespread skin diseases is **Seborrheic dermatitis** (hereinafter "SD") [1]. SD results in the shedding of small skin scales and mainly affects the scalp, eyebrows, eyelashes, ears, armpits and other folds in the skin. The shedding of skin scales from the scalp, known as **dandruff**, can have a serious effect on the aesthetic appearance of a person, and numerous lotions and shampoos are available to treat this affliction. Although the etiology of this syndrome is not completely clear, recent evidence has indicated that the lipophilic yeast Malassezia

furfur (syn. Pityrosporum orbiculare) is associated with this disease [2]. This yeast was also shown to cause fungemia and pulmonary infections in debilitated individuals, and particularly in neonates and adults receiving intralipid [3]. This led to the use of antimycotics, such as ketoconazole, as therapy for SD. However, since ketoconazole is a prescription drug, its use for the treatment of SD has been limited. An inexpensive, non-prescription formulation would therefore be desirable for the treatment of SD.

Web site: http://www.delphion.com/details?pn=US06046176\_\_

# • Composition and method for hair and scalp treatment

Inventor(s): Nguyen; Carolina (Garden Grove, CA), Parr; James W. (San Juan Capistrano, CA), Sun; Ziming (Fountain Valley, CA), Travaline; Darcy (Coto De Caza, CA)

Assignee(s): Amitee Cosmetics, Inc. (costa Mesa, Ca)

Patent Number: 6,455,058

Date filed: September 13, 2000

Abstract: A hair and scalp treatment composition containing (1) an anti-dandruff agent such as salicylic acid, (2) a polyethylenimine, and (3) an amphoteric surfactant. The composition provides superior effects for repairing damaged hair, protecting hair against chemical and mechanical damage. In addition, the composition also provides scalp treatment for against **dandruff**, **seborrheic dermatitis** and psoriasis. The composition could be incorporated into either aqueous or anhydrous solvent systems.

Excerpt(s): This invention is directed to the field of hair and scalp treatments. The following is intended to provide a background of the inventive composition and method of this patent; however, this discussion is not intended to suggest that the information set forth is prior art. In today's hair care market, there continues to be a long-felt need for hair care products effective to facilitate the prevention of hair damage and also to repair damaged hair. There are many different products in the market and most of them target specific problems. Since most people have an accelerated life pace, they are looking for multi-functional products that can simplify their daily routine.

Web site: http://www.delphion.com/details?pn=US06455058\_\_

# Composition for the effective treatment of scalp diseases that delivers magnesium adsorbed in alumina silicate clays to affected sites

Inventor(s): Barabino; William A. (North Reading, MA), Cross; Robert J. (Haverhill, MA)

Assignee(s): Physiological Research Associates (north Reading, Ma)

Patent Number: 4,931,274 Date filed: August 17, 1988

Abstract: A composition for effectively treating **dandruff**, **seborrheic dermatitis** and scalp psoriasis comprising a combination of essential ingredients consisting of microfine particles of a clay mineral containing adsorbed magnesium, water, ethanol, sodium chloride and, optionally, minor amounts of glycerin and precipitated sulfur. The effectiveness of the method in treating such scalp diseases by topical application to the scalp epidermis is predicated on the capacity of the composition to release and deliver

magnesium cations and hydroxyl anions to the causative sites and return the associated pathological cells to a normal morphology.

Excerpt(s): The present invention relates to a composition and a method for the effective treatment of scalp diseases. More particularly, this invention relates to a method of treating dandruff, seborrheic dermatitis and scalp psoriasis by topical application to the outer layer of the epidermis an effective amount of a composition which releases and delivers Mg.sup.++ and OH.sup.- anions to the causative sites. Dandruff, seborrheic dermatitis and scalp psoriasis are symptomatic diseases resulting from a progessively increasing turnover rate of the epidermal cells of the scalp basale lamina and sebaceous glands. Sebum is known to be toxic to the epidermis onto which it flows. It is presently postulated that excessive sebum production from the pathological condition of multiple layers of growth cells in the periphery of the sebaceous gland increases this toxicity, resulting in premature necrosis and replacement of the scalp epidermis. Excessive sebum production will manifest itself as mounds or scales of exudate on the epidermis and as follicular plugs. Heretofore, these conditions could only be "treated" or "relieved" and prior compositions for treating and relieving these disease have been found to be without significant or permanent success. The use of magnesium aluminum silicates and other alumina silicates in certain medical and health products as an inert ingredient is well-known. In 1982, the FDA attempted, via the Federal Register, to establish a monograph for non-prescription or over-the-counter (OTC) drug products for the control of dandruff, seborrheic dermatitis and psoriasis. It reviewed 85 ingredients contained in marketed products, 32 other ingredients classified as active, and 24 inactive ingredients. None of these reviewed ingredients were magnesium aluminum silicate. In an independent survey of all available OTC drug products for treatment of scalp diseases, comprising a total of 49 ingredients, only two listed magnesium aluminum silicate as ingredients. However, in the first case, sulfur, a keratolytic, was listed as the active ingredient and, in the second case, zinc pyrithione, a cytostatic, was the listed active ingredient.

Web site: http://www.delphion.com/details?pn=US04931274\_\_

# • Composition for treating and/or ameliorating the diseases of dandruff, seborrheic dermatitis, psoriasis and eczema and symptoms thereof

Inventor(s): Baker; Rex J. (Shanghai, CN), Hopkins; John (Newbury, GB), Khaiat; Alain (Singapore, SG), Manigbas; Noel D. (Muntinlupa, PH), Ping; Elizabeth Wen (Shanghai, CN)

Assignee(s): Johnson & Johnson Consumer Products, Inc. (skillman, Nj)

Patent Number: 6,333,027 Date filed: April 21, 2000

Abstract: A composition that is useful for treating and/or ameliorating the diseases of dandruff, seborrheic dermatitis, psoriasis, and eczema and/or the symptoms associated therewith, and is non-stinging to the eyes is disclosed. The composition contains from about 0.5 weight percent to about 16 weight percent of at least one amphoteric surfactant; from about 1 weight percent to about 10 weight percent of at least one anionic surfactant; from about 0.1 weight percent to about 10 weight percent of at least one non-ionic surfactant; and from about 0.1 percent to about 15 percent active ingredient selected from Undecylenamidopropylbetaine, Undecylenic Acid, and mixtures thereof. A method for treating and/or ameliorating the diseases of dandruff, seborrheic dermatitis, psoriasis, and eczema and/or the symptoms associated therewith

including topically applying an effective amount of the composition to the area desired is also disclosed.

Excerpt(s): The present invention relates to a composition that is useful for treating and/or ameliorating the disease of dandruff, seborrheic dermatitis, psoriasis And eczema and/or the symptoms associated therewith and has a low degree of ocular and skin irritation. More specifically, this invention is related to such compositions comprised of undecylenamidopropylbetaine and mixtures thereof with undecylenic acid which are suitable for such uses. It is well known that many surfactants used in shampoos are irritating to the eyes, which is of particular concern in shampoos used on infants and children. As a result, several less irritating surfactants have been developed. However, as children approach the age of puberty, hormonal changes associated with the development of scalp conditions normally associated with dandruff, such as scalp irritation and scaling, often occur. Unfortunately the active ingredients that are effective in treating such conditions are irritating to the eyes. For example, Undecylenic Acid, which is commercially available from Elf Atochem of France, and its betaine derivative, Undecylenamidopropylbetaine, which is commercially available from CECA-ATO of France under the tradename, "Amphoram U," are known as being useful for antidandruff properties in shampoos, but not without the disadvantage of eye irritancy. Therefore, there is a need for a shampoo formulation, which is not only suitable for use by children to effectively treat the skin conditions cited above, but also possesses a low degree of ocular and skin irritation.

Web site: http://www.delphion.com/details?pn=US06333027\_\_\_

# Composition for treating skin conditions

Inventor(s): Scivoletto; RoseMarie (10249 El Paraiso Pl., Delray Beach, FL 33446)

Assignee(s): None Reported Patent Number: 6,248,763 Date filed: October 12, 1999

Abstract: Compositions for skin treatment are disclosed and include nicotinamide, nicotinic acid, and nicotinic esters as active ingredients. The compositions are applied topically to the skin to treat skin conditions including acne, fine lines and age spots, itching and pain from insect bites, bee stings, fungi (including athletes foot and jock itch), flaking and/or scaly skin (including dandruff, seborrheic dermatitis, psoriasis and heat rash), and burns. Different compositions are presented for use as an acne treatment, a face and body wash, a dermatophyte (nail fungus) treatment. Still another is intended for use in makeup, and another in lipstick.

Excerpt(s): The present invention relates generally to compositions for treating various skin conditions and, more particularly to a topically applied skin treatment composition including a nicotinic ester as an active ingredient. Various compositions containing nicotinic esters have been known and commonly used for inducing and stimulating hair growth. Examples of these can be found in the U.S. patents to Grollier, U.S. Pat. Nos. 5,157,036 and 4,968,685. In U.S. Pat. No. 5,468,492, Szaloki discloses a use of vitamin E nicotinate as a rubefacient to improve the circulation of the blood of the scalp. Other compositions containing methyl nicotinate have been proposed as an analgesic for the symptomatic relief of localized pain of musculo-skeletal etiology, as evidenced by the U.S. patent to Fisher, U.S. Pat. No. 3,880,996. A product is available and sold under the trade name FINALGON, which is a topical rubefacient including nicotinic acid. The

product is intended for use as a temporary relief from pain caused by muscular rheumatism and does not disclose use as a skin treatment.

Web site: http://www.delphion.com/details?pn=US06248763\_\_

# • Compositions for the treatment of dandruff

Inventor(s): Dascalu; Avi (Tel-Aviv, IL), Oron; Yoram (Tel-Aviv, IL)

Assignee(s): Ramot University Authority for Applied Research and Industrial (ramat-

aviv, Il)

Patent Number: 6,075,017 Date filed: January 7, 1998

Abstract: Seborrheic dermatitis of the scalp is treated by a synergistic combination of a cytotoxic agent and an antifungal agent.

Excerpt(s): The invention relates to pharmaceutical compositions for use in the treatment of **seborrheic dermatitis** of the scalp. Dandruff, **seborrheic dermatitis** of the scalp, is a common disease involving 3-5% of the population. **Dandruff** is, in many cases, the precursor of alopecia (baldness) and constitutes a chronic and almost intractable cosmetical and social inconvenience. The pathophysiology of the disease remains unknown, although it is known to involve a hyperproliferative state of the skin, a limited inflammatory process, and a secondary microbial colonization by the lipophilic yeast Pityrosporum, which is abundant and significantly overpopulated on the scalp of seborrheic patients. Dandruff is a chronic and almost incurable disease. Available treatments result only in short term effects with an eventual recurrence of the disease.

Web site: http://www.delphion.com/details?pn=US06075017\_\_

#### Cradle cap kit

Inventor(s): Muldoon; Tania (64-47 185th St., Fresh Meadows, NY 11365)

Assignee(s): None Reported Patent Number: 6,213,129

Date filed: September 28, 1999

Abstract: The present invention 10 discloses a device used to treat **cradle cap.** The device discloses a contoured handle 20 having a cavity 32 inside for containing liquid 34, e.g., baby oil. Attached to the distal end is a comb member 14 and a hairbrush member 16 having a recessed applicator 28 contained therein which is slidably operated by a switch 18 on the exterior of the device. The handle 20 also has a spray head assembly 36 attached thereto having a spray nozzle 22 and trigger 24 thereon. A storage container 12 is provided for storage of the present invention 10 between uses. Another embodiment discloses the handle 20 having a connection means 54 for connection to a separate member 52 comprising a comb member 14 and a hair brush member 16.

Excerpt(s): The present invention relates generally to hairbrushes and, more specifically, to a baby care product used to treat a condition in newborns commonly referred to as **cradle cap.** The present invention incorporates means for applying baby oil to loosen the thick, crusty epidermal layer of the scalp, means for massaging the scalp area and means for removing the scaly skin particles from the scalp using a hairbrush-like device. The

hairbrush-like device has a contoured cylindrical housing conforming to the shape of said device wherein said device can be stored until desired use. Thereby preventing contamination of said device by dust and dirt. The hairbrush-like device has a fine toothed comb and an oppositely opposed soft bristled hairbrush on the distal end and a handle on the proximal end.

Web site: http://www.delphion.com/details?pn=US06213129\_\_

### Hair treatment composition for prevention of dandruff in hair

Inventor(s): Ogawa; Masataka (Yokohama, JP), Sakamoto; Tetsuo (Tama, JP), Tamura;

Uhei (Fujisawa, JP), Yanagi; Mitsuo (Machida, JP)

Assignee(s): Shiseido Company Ltd. (tokyo, Jp)

Patent Number: 4,728,667 Date filed: April 30, 1986

Abstract: A hair treatment composition comprising 0.1% by weight or more of 3,4,4'-trichlorocarbanilide and 0.03% by weight or more of vitamine E acetate in an aqueous medium. This hair treatment composition can effectively prevent **dandruff** in the hair without causing adverse side effects to the skin or scalp.

Excerpt(s): The present invention relates to a hair treatment composition suitable for use in preventing **dandruff** (or scurf) in the hair. More specifically, it relates to a hair treatment composition suitable for use in preventing **dandruff** in the hair containing, as effective or active ingredients, trichlorocarbanilide (or triclocarban) and vitamin E acetate (i.e., the acetic acid ester of vitamin E). It is generally believed that **dandruff** is composed of, for example, secretions from the sebaceous glands, secretions of the sweat glands, and the scalings of the cuticle layers, and that **dandruff** is profused by excess secreations of, for example, the sebaceous glands. It is further believed that, when the skin or scalp is infected with bacteria or yeasts, **dandruff** is abnormally accelerated. For this reason, hair treatment compositions containing bacteriocides have been heretofore used for preventing **dandruff** in the hair. For example, it is well-known in the art that zinc pyrithione (i.e., "ZPT" hereinbelow) when used in the hair treatment composition is the most effective agent for preventing **dandruff** in the hair. However, some bacteriocides have adverse side effects and, therefore, it is desirable to avoid the use of a relatively large amount of bactericides in hair treatment compositions.

Web site: http://www.delphion.com/details?pn=US04728667\_\_

#### • Local treatment of dandruff, seborrheic dermatitis, and psoriasis

Inventor(s): Knoll; Donald W. (Waukesha, WI), Shelton; David L. (Racine County, WI),

Szymczak; Thomas J. (Racine County, WI)

Assignee(s): S. C. Johnson & Son, Inc. (racine, Wi)

Patent Number: 4,822,604 Date filed: May 20, 1985

Abstract: A clear, therapeutic hair care composition is presented having a low pH and useful in the local treatment of **dandruff**, **seborrheic dermatitis** and psoriasis of the scalp which resists oxidative decomposition. The shampoo is comprised of a detergent shampoo base, a therapeutic amount of a keratolytic agent and a keratolytic stabilizing

agent to stabilize the keratolytic agent against oxidative decoloration decomposition catalyzed by ultraviolet radiation exposure. The keratolytic agent is preferably a salicylate and preferably salicylic acid and the keratolytic stabilizing agent is a tertiary amine.

Excerpt(s): This invention relates to a clear, therapeutic hair care composition having low pH for use in local treatment of **dandruff**, **seborrheic dermatitis**, and psoriasis of the scalp which resists decoloration due to oxidative decomposition. This invention further relates a clear, therapeutic hair care composition having low pH for use in local treatment of **dandruff**, **seborrheic dermatitis**, and psoriasis of the scalp which contains a detergent shampoo base, a therapeutic amount of keratolytic agents and keratolytic stabilizing agents in an amount sufficient to stabilize the keratolytic agents against decoloration decomposition from oxidation. This invention further relates to a method to create a clear, therapeutic hair care composition having low pH which resists decomposition due to oxidation.

Web site: http://www.delphion.com/details?pn=US04822604\_\_

### Method and composition for treating psoriasis, seborrheic dermatitis and eczema

Inventor(s): Smith; Lorraine J. (3010 S. Harvard Ste. 235, Tulsa, OK 74114), Smith; Steven

A. (3010 S. Harvard Ste. 235, Tulsa, OK 74114)

Assignee(s): None Reported Patent Number: 5,433,954 Date filed: December 3, 1992

Abstract: Psoriasis, **seborrheic dermatitis** and eczema are treated by oral administration of inorganic nickel compound(s), with or without inorganic bromide(s). In an especially preferred embodiment, the nickel compound used to treat these diseases is NiBr.sub.2.

Excerpt(s): Psoriasis is a chronic skin disorder that is proliferative in nature and widespread throughout the world, afflicting millions of humans and even domesticated animals having similar proliferative integument problems. The skin disorder is characterized by recurrent, elevated red lesions, plaques or rarely pustules on the skin. These plaques are the results of an excessively rapid growth and shedding of epidermal (skin) cells. No one knows what causes this abnormal cell proliferation. Its severity and course vary greatly from case to case, and also in the individual afflicted with the disease. Recurrences are almost the rule with intervals varying from one month to many years. One person may go through life with a single patch on the elbow, knee or scalp, while another will have repeated attacks of a generalized eruption or widespread chronic lesions lasting for years without remission. As discouraging as it may be, medical science and literature are replete with indications that patients exhibiting such lesions are destined for life to be "psoriatic." With all of the advances in medical science, no one knows what causes this abnormal cell proliferation. With some of it, it is felt that some type of biochemical stimulus triggers this abnormal cell growth. It is still unknown whether the origin of this biochemical malfunction resides in the skin, in the immune system, in the white blood cells, or is possibly psycho-neural. It is known that certain environmental factors can "trigger" the initial appearance or worsening of psoriasis. Conversely, the symptoms can spontaneously clear for reasons scientists do not understand. Treatment of the psoriasis is aimed at clearing the lesions for as long as possible. This is what is meant by the term "remission" or "clearance." In any event, medical science has fairly well agreed that psoriasis is an heritable disease in which the

specific defect seems to be unknown. For years there have been many attempts to treat the disease, and several topical and systemic treatments for psoriasis which inhibit cell division have been with limited success in clearing the skin for short periods of time. Yet, the reason why these treatments work is not yet clearly understood. Treatments which have been suggested in the art appear to be symptomatic and palliative. Lesions may disappear spontaneously or as a result of the therapy, but recurrences are likely. There is a tendency for each remedy gradually to lose its effectiveness or develop dangerous accumulative toxicity. Rarely, however, is the disease apparently cured, showing no evidence for years.

Web site: http://www.delphion.com/details?pn=US05433954\_\_

### Method of treating immunoinflammatory disease

Inventor(s): Caufield; Craig E. (Plainsboro, NJ), Musser; John H. (Alameda, CA), Sehgal;

Surendra N. (Princeton, NJ)

Assignee(s): American Home Products Corporation (new York, Ny)

Patent Number: 5,286,730

Date filed: August 17, 1992

Abstract: This invention provides a method of treating immunionflammatory skin disease in a mammal in need thereof which comprises administering an antiimmunoinflammatory amount of rapamycin, alone or in combination with cyclosporin A, orally, parenterally, intranasally, intrabronchially, topically, transdermally, or rectally. As such, rapamycin, alone or in combination with cyclosporin A, is useful in treating skin diseases such as psoriasis, atopic dermatitis, contact dermatitis, eczematous dermatitis, seborrheic dermatitis, Lichen planus, Pemphigus, bulus pemphigoid, Epidermolysis bullosa, urticaria, angioedemas, vasculitides, erythemas, cutaneous eosinphilias, and the like.

Excerpt(s): Skin diseases such as contact hypersensitivity, atopic dermatitis, and psoriasis are characterized by hyperproliferative and inflammatory skin disorders. A large population suffers from these disorders, psoriasis; for example, afflicts approximately 2% of the population in Western countries [Ziboh, V. A. Psoriasis: Hyperproliferative/Inflammatory skin disorder, Drug Development Research 13: 137-146, (1988)]. Human skin diseases like psoriasis are characterized by histopathologically distinct patterns of infiltration by T cells, B cells, monocytes and granulocytes. These leukocyte cell infiltrations are the consequence of expression of intercellular adhesion molecules and release of cytokine and chemotactic factors by nonhematopoietically derived cells (e.g. keratinocytes) of the skin which in turn augment hyperplasia. Current treatment of immunologically mediated skin disorders involves the use of antiinflammatory agents such as glucocorticoids and antiproliferative agents such as methotrexate, 5-fluorouracil, and retinoids. Recently, use of the immunosuppressive agent cyclosporin A has been reported to give clinical improvement of psoraisis. [Ellis, J. Am. Med. Assoc. 256: 3110-3116, (1986)]. However, its usefulness in psoriasis is limited due to high incidence of nephrotoxicity [Ellis, New England J. Med. 324: 277-84, (1991)], and the observation of relapse after cessation of the treatment with cyclosporin A [Griffiths, J. Am. Acad. Dermatol. 23: 1242-1247, (1990)]. Rapamycin, a macrocyclic triene antibiotic produced by Streptomyces hygroscopicus [U.S. Pat. No. 3,929,992] has been shown to prevent the formation of humoral (IgE-like) antibodies in response to an albumin allergic challenge [Martel, R., Can. J. Physiol. Pharm. 55: 48 (1977)], inhibit murine T-cell activation [Staruch, M., FASEB 3: 3411 (1989)], and prolong survival time of organ grafts in histoincompatible rodents [Morris, R., Med. Sci. Res. 17: 877 (1989)].

Web site: http://www.delphion.com/details?pn=US05286730\_\_

# • Method of treating seborrhea with 5-.alpha. reductase inhibitors

Inventor(s): Gormley; Glenn J. (Westfield, NJ), Kaufman; Keith D. (Westfield, NJ), Stoner; Elizabeth (Westfield, NJ), Waldstreicher; Joanne (Scotch Plains, NJ)

Assignee(s): Merck & Co., Inc. (rahway, Nj)

Patent Number: 6,355,649 Date filed: October 30, 2000

Abstract: The instant invention involves a method of treating and/or reversing androgenic alopecia and promoting hair growth, and methods of treating acne vulgaris, **seborrhea**, and female hirsutism, by administering to a patient in need of such treatment a 5.alpha.-reductase 2 inhibitor, such as finasteride, in a dosage amount under 5 mgs/day.

Excerpt(s): Certain undesirable physiological manifestations, such as acne vulgaris, seborrhea, female hirsutism, androgenic alopecia which includes female and male pattern baldness, and benign prostatic hyperplasia, are the result of hyperandrogenic stimulation caused by an excessive accumulation of testosterone ("T") or similar androgenic hormones in the metabolic system. Early attempts to provide a chemotherapeutic agent to counter the undesirable results of hyperandrogenicity resulted in the discovery of several steroidal antiandrogens having undesirable hormonal activities of their own. The estrogens, for example, not only counteract the effect of the androgens but have a feminizing effect as well. Non-steroidal antiandrogens have also developed, 4'-nitro-3'been for example, trifluoromethylisobutyranilide. See Neri, et al., Endocrinol. 1972, 91 (2). However, these products, though devoid of hormonal effects, compete with all natural androgens for receptor sites, and hence have a tendency to feminize a male host or the male fetus of a female host and/or initiate feed-back effects which would cause hyperstimulation of the testes. The principal mediator of androgenic activity in some target organs, e.g. the prostate, is 5.alpha.-dihydrotestosterone ("DHT"), formed locally in the target organ by the action of testosterone-5.alpha.-reductase. Inhibitors of testosterone-5.alpha.reductase will serve to prevent or lessen symptoms of hyperandrogenic stimulation in these organs. See especially U.S. Pat. No. 4,377,584 assigned to Merck & Co., Inc., issued Mar. 22, 1983. It is now known that a second 5.alpha.-reductase isozyme exists, which interacts with skin tissues, especially in scalp tissues. See, e.g., G. Harris, et al., Proc. Natl. Acad. Sci. USA, Vol. 89, pp. 10787-10791 (Nov. 1992). The isozyme that principally interacts in skin tissues is conventionally designated as 5.alpha.-reductase 1 (or 5.alpha.reductase type 1), while the isozyme that principally interacts within the prostatic tissues is designated as 5.alpha.-reductase 2 (or 5.alpha.-reductase type 2). Finasteride (17.beta.-(N-tert-butylcarbamoyl)-4-aza-5.alpha.-androst-1-ene-3-one), marketed by Merck & Co., Inc. under the tradename PROSCAR.RTM., is an inhibitor of 5.alpha.-reductase 2 and is known to be useful for the treatment of hyperandrogenic conditions. See e.g., U.S. Pat. No. 4,760,071. Finasteride is currently marketed in the United States and worldwide for the treatment of benign prostatic hyperplasia. Finasteride's utility in the treatment of androgenic alopecia and prostatic carcinoma is also disclosed in the following documents: EP 0 285,382, published Oct. 5, 1988; EP 0 285 383, published Oct. 5, 1988; Canadian Patent no. 1,302,277; and Canadian Patent no.

1,302,276. The specific dosages exemplified in the above-noted disclosures varied from 5 to 2000 mg per patient per day.

Web site: http://www.delphion.com/details?pn=US06355649\_\_

# Methods and compositions for the treatment of the skin

Inventor(s): Horrobin; David F. (P.O. Box 818, Kentville, Nova Scotia, CA)

Assignee(s): None Reported Patent Number: 5,594,031 Date filed: April 13, 1995

Abstract: The invention relates to a method of skin treatment comprising the step of topically applying to skin affected by **seborrheic dermatitis** an amount of a composition comprising an excipient and from about 1% to 30% lithium ion, said amount being sufficient to reduce sebum production by said skin. The invention also relates to a method of skin treatment, which comprises the step of topically applying to skin affected by **seborrheic dermatitis** an amount of a composition comprising a topically acceptable excipient and an effective amount of a lithium salt.

Excerpt(s): Skin conditions associated with excess sebum production and in particular **seborrheic dermatitis** and **dandruff** may be treated by the topical application to the affected region of compositions containing an effective amount of a topically acceptable lithium salt. This invention relates to methods for the treatment of skin conditions associated with excess sebum production as well as to compositions for use in such treatment. U.S. Pat. No. 3,639,625 discloses topical compositions containing lithium succinate for the treatment of various skin diseases. In particular, it is stated that the compositions may be useful in the treatment of exfoliative dermatitis, vaginal pruritis, heat rash such as diaper rash, contact dermatitis, poison ivy, acne vulgaris, dry skin conditions, burns and abrasions.

Web site: http://www.delphion.com/details?pn=US05594031\_\_

#### • Methods for the treatment of seborrheic dermatitis

Inventor(s): Ippolito; Ferdinando (Rome, IT), Passi; Siro (Rome, IT)

Assignee(s): Istituto Fisioterapici Ospitalieri (it)

Patent Number: 5,290,809 Date filed: June 2, 1992

Abstract: A pharmaceutical product to be used as an adjuvant treatment of **seborrheic dermatitis** even in HIV positive subjects is disclosed. The pharmaceutical product makes use of methionine, vitamin E and selenium as active principles which directly or indirectly provide a protective response to the damage caused by lipoperoxidation. The pharmaceutical product, in combination with a diet rich in PUFA-PL (polyunsaturated fatty acids of phospholipids), causes skin homeostasis to be restored and the symptoms of skin dermatitis to regress.

Excerpt(s): The present invention relates to a pharmaceutical preparation which can be used in the dermatologic field and, more particularly, as an adjuvant treatment of **seborrheic dermatitis** even in HIV positive subjects. Seborrheic dermatitis has been

referred to as a marker of AIDS. Of course it should be appreciated that it does not have the same marker function performed with a greater specificity by ulcerative chronic herpes simplex, oral hairy leukoplakia and epidemic kaposi. However, because the epidemiologic incidence of **seborrheic dermatitis** in HIV positive subjects is 30% on the average, its presence is a significant indicator of HIV infection. Recent research reported in the literature (F. Ippolito et al.: "Seborrheic-like dermatitis in subjects having acquired immunodeficiency", Giorn. It. Ann. Ven., Vol. 124, 1989; F. Ippolito et al.: "Insufficient haematic levels of the polyunsaturated fatty acids of the phospholipids, vitamin E and glutathione peroxidase as likely risk factors in the onset and development of the acquired immunodeficiency syndrome", Giorn. It. Derm. Ven. Vol. 125, 1990), have pointed out that the haematic levels of vitamin E, polyunsaturated fatty acids of the phospholipids (PUFA-PL) and glutathione peroxidase (GSH-PX) are considerably reduced in subjects having **seborrheic dermatitis** as well as in HIV positive subjects affected and non-affected by **seborrheic dermatitis** compared to checked healthy subjects of the same age.

Web site: http://www.delphion.com/details?pn=US05290809\_\_

### Pharmaceutical compositions and methods for managing scalp conditions

Inventor(s): Murad; Howard (4265 Marina City Dr. Penthouse 11, Marina del Rey, CA

90292)

Assignee(s): None Reported Patent Number: 6,207,694 Date filed: July 27, 1998

Abstract: This application relates to a pharmaceutical composition for the prevention, treatment, and management of scalp conditions, such as **dandruff**, **seborrheic dermatitis**, psoriasis, folliculitis, and hair thinning including a therapeutically effective amount of an acidic component of a hydroxyacid or tannic acid, or a pharmaceutically acceptable salt thereof. A preferred anti-dandruff composition and method of managing **dandruff** includes a therapeutically effective amount of the acid component, a vitamin A component, and an anti-growth agent. A preferred anti-hair thinning composition and method of managing thinning hair includes a therapeutically effective amount of the acidic component, a niacin component present in an amount sufficient to locally increase blood circulation, and a 5-.alpha. reductase inhibitor. The invention also relates to a method of treating chemically processed hair by administering to a patient an amount of an acidic component of a hydroxy acid or tannic acid, or a pharmaceutically acceptable salt thereof, in an amount sufficient to essentially close the cuticle and inhibit modification of the chemically processed hair.

Excerpt(s): This application relates to pharmaceutical compositions, as well as methods, to normalize skin for the prevention, treatment, and management of scalp conditions. Human skin is a composite material of the epidermis and the dermis. The topmost part of the epidermis is the stratum corneum. This layer is the stiffest layer of the skin, as well as the one most affected by the surrounding environment. Below the stratum corneum is the internal portion of the epidermis. Below the epidermis, the topmost layer of the dermis is the papillary dermis, which is made of relatively loose connective tissues that define the micro-relief of the skin. The reticular dermis, disposed beneath the papillary dermis, is tight, connective tissue that is spatially organized. The reticular dermis is also associated with coarse wrinkles. At the bottom of the dermis lies the subcutaneous layer. The principal functions of the skin include protection, excretion,

secretion, absorption, thermoregulation, pigmentogenesis, accumulation, sensory perception, and regulation of immunological processes. These functions are detrimentally affected by, for example, dryness, yeast, and structural changes in the skin, such as due to aging and excessive sun exposure.

Web site: http://www.delphion.com/details?pn=US06207694\_\_

# Pharmaceutical compositions containing 5'-deoxy-5'-methylthioadenosine sadenosylmethionine and their salts for reducing seborrhea

Inventor(s): Moratti; Emanuela Maggioni (Bergamo, IT)

Assignee(s): Bioresearch S.p.a. (milan, It)

Patent Number: 5,753,213 Date filed: March 13, 1990

Abstract: This invention relates to pharmaceutical compositions containing 5'-deoxy-5'-methylthioadenosine, S-adenosyl-methionine and their pharmaceutically acceptable salts able to reduce scalp **seborrhea** and its related furfuraceous desquamation and pruritus.

Excerpt(s): This invention relates to pharmaceutical compositions containing 5'-deoxy-5'-methylthioadenosine (MTA), S-adenosylmethionine (SAMe) and their pharmaceutically acceptable salts able to reduce scalp **seborrhea** aid its related furfuraceous desquamation and pruritus. Seborrhea (increased sebum production) is a very frequently encountered phenomenon which can manifest itself on the glabrous cutis (epidermis of greasy appearance) or on hair-containing zones. On the scalp in particular, the **seborrhea** is frequently accompanied by steatogenous furfuraceous desquamation often associated with pruritus and paresthesia of the capillitium. The hair becomes shiny, greasy and sticky. Therapeutic uses of the product class comprising MTA and SAMe as antivirals, cytostatics and oncogenetic tissue transformation inhibitors are already known and widely described in the literature, such as in GB patent 1,555,991. Therapeutic uses of this product class as anti-inflammatories, antipyretics, platelet antiaggregants and sleep inducers are also known, as described in U.S. Pat. Nos. 4,454,122 and 4,373,097. Reference should be made to the aforesaid patents for descriptions of MTA and SAMe preparation processes.

Web site: http://www.delphion.com/details?pn=US05753213\_\_\_

# Potassium-containing composition useful in the treatment of acne, psoriasis and seborrhea

Inventor(s): Goodwin; Gary (31 Brushwood Dr., Shirley, NY 11967-4009), Oge; Eray (11 Clamshell La., Northport, NY 11768)

Assignee(s): None Reported Patent Number: 5,955,067 Date filed: July 23, 1996

Abstract: A composition is disclosed which is useful in alleviating, at least in part, symptoms of acne vulgaris, psoriasis or **seborrhea**, which includes a potassium-based compound a dermatologically acceptable base for the potassium-based compound, which is preferably a potassium salt, and which include potassium acetate, potassium

aluminate, potassium arsenite solution, potassium bicarbonate, potassium bisulfate potassium bitartararte, potassium bromide, potassium carbonate, potassium chloride, potassium citrate, potassium gluconate, potassium glycerophosphate, potasium iodate, potassium iodide, potassium manganate, potassium permanganate, potassium phosphate monobasic potassium phosphate dibasic, potassium phosphate tribasic, potassium phosphite or a combination thereof. The composition is topically applied to the areas of a patient's skin which are afflicted with any of acne vulgaris, psoriasis or **seborrhea**.

Excerpt(s): The present invention relates, generally to a composition containing potassium and its use for alleviating, at least in part, the symptons of acne, psoriasis and **seborrhea**, as well as a method for its use. More particularly, the present invention relates to a composition containing potassium, which is applied topically to a person's skin in area afflicted with acne, psoriasis or **seborrhea** for the purpose of reducing the effects of such skin ailments. Acne vulgaris is a common inflammatory pilosebaceous skin disease characterized by comedones, papules, pustules, inflamed nodules, superficial pus filled cysts and in extreme cases canalizing and deep inflamed sacks.

Web site: http://www.delphion.com/details?pn=US05955067\_\_\_

## Remedy for dermatitis

Inventor(s): Hasegawa; Kazuo (Tokyo, JP), Ishii; Takako (Tokyo, JP), Kitajima; Hideaki

(Tokyo, JP), Tsunoda; Kenji (Tokyo, JP), Yoneda; Akiko (Tokyo, JP)

Assignee(s): Taisho Pharmaceutical Co., Ltd. (tokyo, Jp)

Patent Number: 5,997,852 Date filed: October 8, 1997

Abstract: A dermatitis-curing agent, characterized by comprising (A) a zinc compound and (B) at least one compound selected from the group consisting of multivalent unsaturated fatty acids and their esters as effective components is very effective for enteropathic acrodermatitis syndrome, and **seborrheic dermatitis**, psoriasis vulgaris, bullous dermatitis and puritus cutaneus, which show similar skin symptoms, or for symtoms due to zinc deficiency caused by injuries, burn injuries and frostbites.

Excerpt(s): The present invention relates to a dermatitis-curing agent. Zinc (Zn) is a trace element contained in a high concentration next to iron throughout all the tissues and body fluids of human beings. Physiological actions of zinc relate to, for example, growth, skeleton growth, activation of metabolism of skin and its related organs, maintenance of reproductive functions, maintenance of gustatory sensation and olfactory sensation, effects on mental conditions and action, improvement of immunological functions, etc.

Web site: http://www.delphion.com/details?pn=US05997852

### • Shampoo compositions and oil compositions and methods for treatment of cradle cap

Inventor(s): Eriksen; Karla S. (1917 Ellis St., San Francisco, CA 94115), Osburn; Deborah

(855 Spring St., Sausalito, CA 94965)

Assignee(s): None Reported Patent Number: 6,043,202 Date filed: March 6, 1998

Abstract: The present invention concerns an improved shampoo composition, an improved oil composition and an improved method for the treatment of **cradle cap** (seborrhea dermatitis) primarily in infants and small children. In the improved method, the scalp of an infant is treated with the improved oil followed by gentle brushing and the scalp is then contacted with the improved shampoo and water. Usually the **cradle cap** condition is eliminated in 1 to 5 days. A kit including the oil, shampoo, sponge, brush, fine toothed comb and optional separate instructions are described.

Excerpt(s): The present invention concerns shampoo compositions and oil compositions and methods using these compositions for the treatment of **cradle cap**. Cradle cap is usually a recurring condition most prevalent in infants between about one and nine months. Thick yellow scales occur in patches over the scalp and may also occur on the face, neck and behind the ears. **Cradle cap** is a form of **seborrhea** dermatitis. Although unsightly, **cradle cap** is usually harmless but can pose a threat to health if the scalp becomes infected. The difficulty of the existing treatments is that the use of the oils and/or shampoos, as individual ingredients are not effective, are not well quantified and are not used in combination with each other for rapid treatment of **cradle cap**.

Web site: http://www.delphion.com/details?pn=US06043202\_\_

# • Shampoo for treating seborrheic dermatitis, dandruff or psoriasis

Inventor(s): Rapaport; Jeffrey (Fort Lee, NJ)

Assignee(s): Dermatology Home Products, Inc. (fort Lee, Nj)

Patent Number: 5,730,965 Date filed: June 13, 1996

Abstract: A method is provided to treat and/or prevent **seborrheic dermatitis** of the scalp and other hair bearing areas, **dandruff** or psoriasis by topically applying to the skin and washing the skin in a shampoo containing an effective amount of a treatment composition containing chloroxylenol, preferably by daily application in a pharmaceutically acceptable vehicle at a concentration of from 0.1 to five (5) percent by weight, preferably about one (1) percent by weight.

Excerpt(s): The present invention is directed to a method of treating **seborrheic dermatitis** of the scalp and other hair bearing areas, **dandruff** or psoriasis. Treatment of **seborrheic dermatitis** and **dandruff** has been discussed in the prior art. Among the most common treatment regimen is a shampoo with zinc pyrithione as an active ingredient, such as discussed in "Announcing Two improvements in Head & Shoulders.RTM.", a 1995 advertisement publication of Procter & Gamble, the manufacturer of Head & Shoulders.RTM. shampoo. Samuel L. Moschella, M.D. et al. in "Dermatology", in a chapter entitled "Papulosquamous Eruptions and Exfoliative Dermatitis" W. B. Saunders Company, Third Edition, pgs. 610-611, 1992 states that microbiological studies have revealed that skin conditions such as psoriasis are

associated with increased numbers of Staphylococcus aureus bacteria, and that improvements in psoriatic skin lesions are noticed when topical and systemic antibiotics are administered.

Web site: http://www.delphion.com/details?pn=US05730965\_\_

# Topical amino acid - vitamin complex compositions for pharmaceutical and cosmetic use

Inventor(s): Cameron; Allan R. (Soldiers Point, AU), Manning; John W. (Decatur, GA),

Thompson; Margaret A. (Walnutport, PA)

Assignee(s): Curafas Incorporated (walnutport, Pa)

Patent Number: 5,425,954

Date filed: September 30, 1993

Abstract: The invention provides a composition for topical application to the skin comprising a mixture of Panthenol (B.sub.5), Cod Liver Oil, Alpha Tocopherol Acetate, Arginine, Isoleucine, Leucine, Methionine, Phenylalanine, Threonine, and Valine in admixture with a suitable carrier. These compositions are particularly useful for the treatment of burns, cuts, abrasions, insect bites, inflammation from sun and wind exposure, dry skin, psoriasis, **seborrheic dermatitis**, and eczema.

Excerpt(s): The present invention relates generally to topically applicable pharmaceutical and cosmetic compositions, and more particularly, to compositions containing specific mixtures of amino acids and vitamins. The stratum corneum or horny layer of the epidermis of the human skin contains certain water soluble cellular components which protect internal tissues from external forces. These cellular components are composed of, among other things, small polypeptides and amino acids, and permit the stratum corneum to absorb and retain water, thereby preventing dryness of the skin. Several morphological changes, including a decreased moisture content of the stratum corneum, coupled with reduced eccrine and sebaceous gland output can decrease the presence of these components which protect the skin and allow for loss of collagen, the major skin protein. These morphological changes which result in a loss of integrity of the horny layer of the skin can be caused by a variety of conditions. Among such conditions are environmental, e.g. sun or wind exposure, trauma or wounds, e.g. cuts, burns or abrasions, exposure to chemicals such as alkaline soaps, detergents, liquid solvents, oils, preservatives, and disease, eg. eczema, psoriasis, seborrheic dermatitis.

Web site: http://www.delphion.com/details?pn=US05425954\_\_\_

# Topical treatment of seborrheic dermatitis with ketoconazole

Inventor(s): Belew-Noah; Patricia W. (Germantown, TN), Rosenberg; E. William

(Memphis, TN)

Assignee(s): University of Tennessee Research Corporation (knoxville, Tn)

Patent Number: 4,942,162 Date filed: January 27, 1989

Abstract: A method is provided for treating psoriasis and **seborrheic dermatitis** in humans by topical application of an effective, lesion reducing amount of ketoconazole to affected areas.

Excerpt(s): The present invention relates to methods for the treatment of skin disorders of **seborrheic dermatitis** and psoriasis and more particularly relates to topical treatment of those disorders by topical application of imidazole antibiotics to affected areas. Seborrheic dermatitis is a skin disorder characterized by lesions produced by an abnormal increase (>2X) in the production and shedding of epidermal cells from the skin, particularly in hairy areas, body folds, and in and behind the ears. Typically, the lesions have indefinite borders with an inflamed appearance and are covered by scales having a greasy appearance. Psoriasis is a skin disorder also characterized by lesions produced by an even greater abnormal increase (10-20X) in the production of shedding of epidermal cells from the skin. Typically, psoriasis lesions, which are well-defined and have a pink or dull red color, are covered with silvery scales. In addition, capillaries in the skin in affected areas undergo swelling.

Web site: http://www.delphion.com/details?pn=US04942162\_\_\_

# Topical use composition for the treatment of seborrhea affections of the human scalp

Inventor(s): Sala; Rene R. (Barcelona, ES), Taya; Miguel M. (Barcelona, ES)

Assignee(s): Rocador Sociedad Anonima (es)

Patent Number: 4,614,748 Date filed: September 8, 1981

Abstract: The purpose of the invention is a composition for the treatment of affections of the human scalp caused by **seborrhea**. According to the invention the composition is characterized in that it contains N-hydroxyethylacetamide as active ingredient.

Excerpt(s): The present invention relates to compositions useful in combatting affections caused by **seborrhea** on the human scalp. More particularly, this invention is concerned with compositions constituted by or containing N-hydroxyethylacetamide as active ingredient. and it is presented in form of a viscous liquid at room temperature. The density of this product (DIN/20.degree. C.) is 1.12 and the molecular weight thereof is 103. The boiling point thereof is 155.degree. C. under an absolute pressure of 5 mm Hg. Several processes are known for the preparation of this compound. The following may be cited from among these: one mole of acetyl chloride is poured carefully over a solution of 2 moles of monoethanolamine in methylene chloride. The mixture is cooled over ice bath during this addition. The mixture is stirred for two hours and filtered. The solvent is removed by distillation at atmospheric pressure and thereafter in vacuo (5 mm Hg), thus leading to the separation of the N-hydroxyethylacetamide.

Web site: http://www.delphion.com/details?pn=US04614748\_\_

# Treatment of acne, seborrheic dermatitis and other skin diseases with salt solution containing NACL

Inventor(s): Biener; Hans F. (Munich, DE)

Assignee(s): Bio.life International AG (zug, Ch)

Patent Number: 6,287,548

Date filed: November 21, 1994

Abstract: The present invention provides a composition of matter which has been demonstrated to be a very effective treatment for acne, seborrheic dermatitis and

related skin diseases when applied to and contacted with affected skin areas, while avoiding the disadvantages and complications attendant to more established treatments. The composition comprises a synthetic mixture of salts which, when dissolved in a solvent such as water, is ionically composed primarily of a mixture of sodium and magnesium cations and chloride and sulfate anions, and which is preferably free of added zinc. More specifically, the salt mixture according to the present invention comprises the following range of composition in grams/kilogram of salt mixture in the ionic state, the balance being water of hydration:

Excerpt(s): The invention concerns a topical skin preparation for the treatment of acne, seborrheic dermatitis and other skin diseases. Since acne generally is not life endangering and is regarded by some as a kind of pubertary consequence, only a small part of the people with acne have regular medical treatment. Yet a significant percentage of the population is plagued by this disease. Both disregarding it, as well as excessive and improper treatment, can lead to irreversible scars and changes of the skin, and consequent adverse effects to quality of life. To a large extent, the aforementioned is also true for seborrheic dermatitis and other skin diseases in their different forms such as herpes, from simple irritations of the skin up to severe and irreversible changes of epidermis. For distinguishing of these diseases and in order to define their grade, dermatology uses defined terms which can be measured or counted to a high degree. Acne in its different forms such as acne aestivalis, fulminans, necroticans, cosmetica etc. is mostly defined by papules, pustules, blackheads and whiteheads, while seborrheic dermatitis and related skin diseases are generally characterized by itching, scales and erythema.

Web site: http://www.delphion.com/details?pn=US06287548\_\_

# • Use of.alpha.- and.beta.-santalols major constituents of sandal wood oil, in the treatment of warts, skin blemishes and other viral-induced tumors

Inventor(s): Haque; Azeez U. (Columbus, OH), Haque; Malika H. (Columbus, OH)

Assignee(s): Haque, Inc. (columbus, Oh)

Patent Number: 6,406,706 Date filed: August 11, 2000

Abstract: The present invention provides a method for the treatment of viral-induced tumors in mammals, more specifically, human warts. The method uses.alpha.and beta.-santalols, or mixtures or derivatives thereof, to prepare medicaments for the treatment of viral-induced tumors i.e., warts caused by the human papillomavirus (HPV) in humans. The method of the invention comprises the topical administration of alpha.- and beta.-santalols, or mixtures or derivatives thereof, in a composition derived therefrom, to the human epidermis, as needed. The present invention is also concerned with a unique antiviral composition useful for topical application. The antiviral composition according to this invention is also effective against other DNA viruses such as the DNA pox virus that causes Molluscum contagiosum and may be effective against other DNA viruses such as AIDS virus and RNA viruses. The alpha.and beta.-santalols composition, or mixtures or derivatives thereof, may also be effective in the treatment of genital warts and HPV of the genital tract and in the treatment of cancer of the skin and cervix. The alpha - and beta - santalols, or mixtures or derivatives thereof, may also be effective in the prevention of dryness of the skin, rashes and flakiness associated with seborrheic dermatitis, psoriasis and allergic or eczematous rashes of the skin. The alpha - and beta - santalols, or mixtures or derivatives thereof,

may also be effective in the treatment of acne lesions of the face and the body and in the eradication of pustular acne lesions caused by staphylococcal acne and streptococcal bacterial infections.

Excerpt(s): The present invention generally relates to therapeutic agents for the treatment of viral-induced tumors, such as warts. In one embodiment, the therapeutic agent is in the form of sandalwood oil or an isolate or isolates from the sandalwood oil described herein. Use of the oil or its components as a topical agent for the treatment of viral-induced tumors, such as human papillomavirus-induced tumors, is disclosed. The therapeutic agents in sandalwood oil were found to be.alpha.- and.beta.-santalols. Use of alpha.- and beta.-santalols in the treatment of viral-induced tumors, such as human papillomavirus-induced tumors, is disclosed. Viruses, which induce tumors in mammals, are widespread. Indeed, there are over sixty known types of human papillomaviruses (HPV) which are DNA viruses. These viruses may induce the production of tumors. Some of these HPV's have been associated with benign tumors, such as common warts, while others have been strongly implicated as etiologic agents in dysplasia and carcinomas in the oral and genital mucosa of the infected mammal. Warts are a very common skin lesion in humans and are caused by various human papillomaviruses (DNA virus). Each virus is related to a specific clinical presentation of the wart. Warts are infectious and may be autoinoculated and spread to other individuals by direct contact.

Web site: http://www.delphion.com/details?pn=US06406706\_\_

# • Use of zinc compounds to stabilize a thiazolinone preservative in an anti-dandruff shampoo

Inventor(s): Wiese; Robert S. (Grand Rapids, MI)

Assignee(s): Amway Corporation (ada, Mi)

Patent Number: 5,227,156 Date filed: April 14, 1992

Abstract: The activity of a thiazolinone preservative, in an anti-dandruff shampoo containing pyrithione, is maintained by adding a stabilizer comprising a zinc compound.

Excerpt(s): This invention relates to anti-dandruff shampoos containing a preservative. In particular, it relates to the use of zinc compounds to stabilize the activity of a thiazolinone preservative added to an anti-dandruff shampoo containing zinc pyrithione. It is known that microbiological contamination can result in poor shelf life and aesthetics of shampoos. Accordingly, preservatives are usually added to the shampoo composition during the manufacture of the shampoo to reduce or eliminate such contamination. One problem with adding a preservative to an anti-dandruff shampoo is that other ingredients present in the shampoo may react adversely with the preservative and reduce its activity. Specifically, it has been found that zinc pyrithione reacts adversely with some thiazolinone preservatives to reduce its activity and in turn its ability to prevent or reduce microbiological contamination. Consequently, there is a need for an anti-dandruff shampoo having a stable active preservative. Surprisingly, it has been found that the activity of a thiazolinone preservative in an zinc pyrithione shampoo can be maintained by adding a stabilizer comprising a zinc compound.

Web site: http://www.delphion.com/details?pn=US05227156\_\_

# **Patent Applications on Seborrheic Dermatitis**

As of December 2000, U.S. patent applications are open to public viewing.<sup>9</sup> Applications are patent requests which have yet to be granted. (The process to achieve a patent can take several years.) The following patent applications have been filed since December 2000 relating to seborrheic dermatitis:

 Anti-dandruff and anti-itch compositions containing sensate and sensate enhancercontaining compounds

Inventor(s): Boden, Richard M.; (Ocean, NJ), Christensen, Carol; (Metuchen, NJ), Flammer, Linda J.; (South Orange, NJ), Grainger, Brian T.; (Princeton, NJ)

Correspondence: Joseph F. Leightner, ESQ.; International Flavors & Fragrances INC.; 521 West 57th Street; New York; NY; 10019; US

Patent Application Number: 20030161802

Date filed: February 5, 2002

Abstract: Described are anti-dandruff and anti-itch compositions comprising:(a) an antidandruff agent;(b) a cooling sensate material; and(c) a cooling sensate. Also described are personal care products for reduction of itching including shampoos, soaps, ointments and creams which contain the anti-dandruff and anti-itch compositions.

Excerpt(s): (c) a cooling sensate enhancer, such as vanillyl butyl ether, nonylic acid vanillamide or Jambu oleoresin. Our invention also relates to anti-dandruff shampoos containing such anti-dandruff compositions which shampoos can optionally contain fragrance. Our invention further relates to a method for effecting significant reduction of itching of the scalp, medically known as pruritis, resulting from dandruff, by means of application to the scalp of such anti-dandruff shampoos. Our invention also relates to personal care products containing the aforementioned anti-itch compositions for reduction of itching including shampoos, soaps, ointments and creams. Seborrheic dermatitis, pruritis and dandruff represent wide-spread cosmetic problems. Methods for the treatment of **seborrheic dermatitis**, pruritis and **dandruff** are known in the art. Among the most common treatment regimens are washing with shampoos containing chloroxylenol, pyridinethione heavy metal salts including zinc, cadmium, magnesium, tin, aluminum and zirconium; salts such as zinc pyrithione, sulfur, selenium sulfide, salicylic acid, piroctone olamine also known as octopirox; hexachlorophene, resorcinol, coal tar, coal tar extracts, coal tar solutions, ketoconazole, alkali metal salts and ammonium salts of low molecular weight huminates with a mean molecular weight of a range of 300 to 1500, and certain cationics such cetyldimethylbenzylammonium bromide followed by rinsing, as disclosed in U.S. Pat. Nos. 4,470,982, 5,494,675, 5,641,480, 5,730,965 and 6,294,186, each of which is incorporated herein by reference. Shampoos which contain cooling sensates such as menthol and menthyl lactate are disclosed in U.S. Pat. No. 6,294,186, cited above.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

<sup>&</sup>lt;sup>9</sup> This has been a common practice outside the United States prior to December 2000.

# • Anti-dandruff composition and method of preventing, reducing or treating dandruff formation with same

Inventor(s): Hehner, Ursula; (Brensbach, DE), Hoelzel, Hans; (Fraenkisch-Crumbach, DE), Ringert, Karl-Heinz; (Darmstadt, DE)

Correspondence: Striker, Striker & Stenby; 103 East Neck Road; Huntington; NY; 11743; US

Patent Application Number: 20020172648

Date filed: February 28, 2002

Abstract: The improved anti-dandruff composition contains from preferably 0.03 to 20 percent by weight of a combination of three known anti-dandruff agents, namely climbazole, zinc pyrithione and piroctone olamine. Each of these anti-dandruff agents is preferably contained in an amount of from 0.01 to 10 percent by weight. The improved anti-dandruff agent is applied to a hair-covered body surface to eliminate or alleviate existing **dandruff** or to prevent or reduce occurrences of **dandruff**.

Excerpt(s): The subject matter of the present invention is a composition with cleaning and care properties containing a combination of three anti-dandruff active ingredients comprising climazole, piroctone olamine and zinc pyrithione and its use for treating dandruff formation on hair-covered skin, especially on the scalp. Many people suffer from dandruff formation. The easy appearance of dandruff on the scalp and in the hair is generally seen as an indication of poor grooming. Furthermore the itching or tingling of the skin accompanying dandruff formation is generally considered disturbing. Since the itching frequently triggers a scratching reaction, it can lead to injury of the concerned skin area. Because of that as an additional complication infections with pathogenic excitation can also occur. The dandruff that occurs generally on the hair-covered skin, especially the scalp skin, can have different causes. Normally dandruff arises because the continuously growing uppermost scaly layer of epidermis is stripped off in the form of the smallest flakes, i.e. microflakes. These microflakes can adhere to a greater extent on the more strongly fatty scalp skin because of the sebum secreted from the sebaceous gland of the hair follicle.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

### Anti-dandruff hair styling composition

Inventor(s): Andrassy, George; (Walnut, CA), Hohenstein, Karen A.; (Los Angeles, CA), Simon, Deanna F.; (Lawndale, CA)

Correspondence: Henkel Corporation; 2500 Renaissance Blvd; Ste 200; Gulph Mills; PA; 19406; US

Patent Application Number: 20030008855

Date filed: August 17, 2001

Abstract: The present invention provides a hair styling composition containing at least one active ingredient for the treatment of **dandruff** and/or **seborrheic dermatitis**; at least one thickening agent; and at least one a hair styling resin. In a preferred embodiment of the present invention, the hair styling composition is in the form of a gel that suspends the active ingredient. The present invention also provides a method of treating hair or scalp using the composition of the present invention.

Excerpt(s): This application claims the benefit under 35 U.S.C.sctn.119(e) to U.S. provisional application Serial No. 60/300,499 filed on Jun. 22, 2001, the disclosure of which is hereby incorporated by reference in its entirety. The present invention relates to a hair styling composition and to a method of treating the scalp and/or hair. The composition treats dandruff and/or seborrheic dermatitis while aiding in styling the hair or maintaining a hair style. Actives useful for the treatment of dandruff or seborrheic dermatitis include for example metal salts of pyridinethione, such as the zinc or sodium salts of 1-hydroxy-2-pyridinethione or 2-pyridinethiol-1-oxide; octopirox (hydroxy-4-methyl-6-(2,4,4-trimethylpe-ntyl)-2-pyridone-monoethanolamine salt or INCI name: Piroctone Olamine); selenium disulfide, or combinations thereof. These actives are most typically added to anti-dandruff shampoos which are designed to treat the symptoms of dandruff while effectively cleaning the hair. Much research has been directed to the development of these shampoos, and many patents have been issued in this area. For example, U.S. Pat. No. 5,104,645 to Cardin et al., discloses a shampoo formulation containing metal pyridinethione salts of a particular platelet size in combination with a synergizer compound. U.S. Pat. No. 4,033,895 to Gerstein discloses a shampoo formulation containing stearylamine oxide in combination with sodium lauryl sulfate and zinc pyridinethione to reduce the irritant properties of the shampoo. Several drawbacks of using shampoo compositions to deliver these active ingredients include the short contact time of the shampoo with the scalp, and the potential irritation of the scalp by the shampoo formulation.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# Apparatus and method for high energy photodynamic therapy of acne vulgaris and seborrhea

Inventor(s): Harth, Yoram; (Haifa, IL), Korman, Avner; (Herzlia, IL)

Correspondence: Eitan, Pearl, Latzer & Cohen-zedek; One Crystal Park, Suite 210; 2011

Crystal Drive; Arlington; VA; 22202-3709; US

Patent Application Number: 20010023363

Date filed: January 9, 2001

Abstract: An apparatus and method for the phototherapy of different skin conditions, particularly acne vulgaris and **seborrhea**. The invention consists of a combined treatment with violet/blue light source with a spectral emission in the range of 405-440 nanometer and possible additional spectral bands in the green and red part of the spectrum and the topical application of oxygen transporting compounds, and/or a methylene blue solution. The apparatus includes at least one narrow spectral band light source with spectral emittance concentrated in the violet/blue spectral band and an optical system for controlling spectra and beam parameters of said light source and a mechanical fixture for holding the said light source at an adjustable distance and direction related to the skin treated area, and an electronic unit to control the duration and power and spectral bands of the emitted radiation.

Excerpt(s): This application is a continuation in part application of PCT Application No. PCT/IL99/00374, filed Jul. 7, 1999. The present invention relates to an apparatus and method for the photodynamic therapy treatment of acne vulgaris and **seborrhea** and, more particularly, to a violet/blue light radiating system that illuminates a collimated narrow bandwidth beam on the treated skin area. The method relates to the combined photodynamic skin treatment including narrow band violet/blue light radiation and topical application of oxidative and/or keratolytic agents. The enlargement and

obstruction of sebaceous glands cause acne vulgaris. Due to the accumulation of sebum in the glands, bacteria, mainly propionibacterium acnes (p. acnes), proliferate in the glands. These bacteria cause inflammation and later the formation of pustular lesions and acne cysts, which heal by scarring.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# Apparatus and method for high energy photodynamic therapy of acne vulgaris, seborrhea and other skin disorders

Inventor(s): Harth, Yoram; (Haifa, IL), Korman, Avner; (Herzlia, IL)

Correspondence: Watov & Kipnes, P.C.; P.O. Box 247; Princeton Junction; NJ; 08550; US

Patent Application Number: 20030216795

Date filed: February 13, 2003

Abstract: An apparatus, a device, a system and a method for the phototherapy of different skin disorders including acne vulgaris, **seborrhea** and inflammation. The invention includes a multiple session treatment method by a high irradiance violet/blue CW time gated, or pulsed, light source with a spectral emission in the range of 400-450 nanometer and possible additional spectral bands in the green and red part of the spectrum. The apparatus includes at least one narrow spectral band light source with spectral emittance concentrated in the violet/blue spectral band. The invention can reduce the level of extra cellular pro inflammatory cytokines related to inflammation as well as to significantly reduce the acne bacteria population by a photodynamic effect. A system for the treatment of acne lesions combining the apparatus for the eradication of P. acne bacteria and the acne affected area inflammation and a device for the elimination of the red spots around the acne lesions using intense pulsed light in the spectral band 500-1000 nm.

Excerpt(s): This application is a continuation in part application of U.S. application Ser. No. 10/007,702, filed Dec. 10, 2001, which is a continuation in part application of U.S. application Ser. No. 09/756,130, filed Jan. 9, 2001, which is a continuation in part application of PCT Application No: PCT/IL99/00374, filed Jul. 7, 1999. The present invention relates to an apparatus and method for the photodynamic treatment of acne vulgaris and seborrhea and conditions and symptoms associated therewith as well as other related skin disorders hereinafter referred to at times as "acne", more particularly, to a violet/blue light radiating system that illuminates a high flux narrow bandwidth beam on the treated skin area. The method relates to the photodynamic skin treatment using the narrow band violet/blue light apparatus of the invention. The present invention also relates to the phototherapy of inflammation and particularly to the phototherapy of inflammation using narrow band high intensity light source in the spectral range of 400-450 nm. The invention also relates to the comprehensive treatment of acne skin condition, and more particularly to the combined treatment of acne inflammatory lesions with the reduction of acne lesion localized reddish and irritated skin condition, The post acute acne stage of the typical lesion area is characterized by localized skin redness. The treatment of post acute inflammation treatment phase is naturally consecutive to the preliminary stage of anti bacterial treatment of the inflammatory acne lesion itself.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# • Composition based on etyl ester of linoleic acid and triethyl ester of citric acid for topical use in the treatment of seborrhea and acne

Inventor(s): de Paoli Ambrosi, Gianfranco; (Salo, IT)

Correspondence: Mcglew & Tuttle, PC; Scarborough Station; Scarborough; NY; 10510;

US

Patent Application Number: 20030118623

Date filed: December 16, 2002

Abstract: The present invention relates to a composition for topical use for treating and improving the aesthetic conditions of the skin, which comprises, as an active ingredient, a mixture of ethyllinoleate and triethylcitrate. This composition is active in the treatment of **seborrhea** and acne.

Excerpt(s): This invention concerns a new product for pharmaceutical and/or cosmetic use in the treatment of acne, acne rosacea and seborrhoea. A very large number of people suffer from acne which has a pathological cutaneous picture characterised by a morphological and functional alteration of the pilosebaceous organ with appearance of whiteheads (closed comedo), blackheads (open comedo), papules and in the more serious forms, pustules, nodules, cysts and scars. Acne affects about 80% of the population between the ages of 12 and 30 and, above all in women, may persist even to a more advanced age.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# • Emulsified skin care composition containing salicylic acid, lanolin oil, and propylene glycol

Inventor(s): Farber, Elliott; (North Mankato, MN)

Correspondence: Hogan & Hartson Llp; IP Group, Columbia Square; 555 Thirteenth

Street, N.W.; Washington; DC; 20004; US

Patent Application Number: 20030157137

Date filed: December 19, 2002

Abstract: A composition comprising an oil-in-water emulsion for skin care containing salicylic acid or another hydroxy acid, and propylene glycol to prevent formation of crystals of the hydroxy acid. The composition includes, as an emulsifier, at least one nonionic polyoxyethylene ether with a HLB of about 15 to about 17; in some embodiments, another nonionic polyoxyethylene ether with a HLB of 10 to 12 is also included. The composition also includes lanolin oil and a complex comprising Vitamin A and Vitamin D.sub.3. Other ingredients, such as a hydrophilic carbohydrate-containing polymer or a quaternary ammonium-containing polymer, can be included. Still other ingredients, such as preservatives, chelators, herbal extracts, allantoin and fragrance, can be included. Another aspect of the invention is a method of use of a composition according to the present invention in treating dermatological or systemic inflammatory conditions such as psoriasis, **seborrheic dermatitis**, and **dandruff**.

Excerpt(s): This invention is directed to an improved emulsified skin care composition containing salicylic acid and propylene glycol that is particularly useful for treatment and/or palliation of dermatological or systemic inflammatory conditions such as psoriasis, **seborrheic dermatitis** and **dandruff**. Despite recent improvements in its treatment, psoriasis remains a serious disease of great importance. The lesions of

psoriasis can be painful, unsightly, and disfiguring. Patients suffering from psoriasis are reluctant to be seen in public or undertake activities where the nature of their disease becomes manifest to the population as a whole. Accordingly, the lives of such people are impacted and restricted. The pathological mechanisms underlying psoriasis are not completely known, although much has been learned about these applications.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

#### Method of treatment of seborrheic dermatitis

Inventor(s): Parks, L. Dean; (Ocala, FL)

Correspondence: Melvin K. Silverman; Suite 440; 4901 North Federal Highway; Fort

Lauderdale; FL; 33308; US

Patent Application Number: 20020019354

Date filed: October 12, 2001

Abstract: A method of treatment of **seborrheic dermatitis** includes the application, in the form of either a lotion or a cream, of a mixture including a therapeutically effective amount of ivermectin in water preferably in a concentration of about 750 micrograms per milliliter (mcg/ml), in the case of a lotion, and with a pharmaceutically acceptable carrier if used as a cream. Such a lotion or cream is applied nightly preferably for a period of seven days and then employed on a maintenance basis one to four times per month.

Excerpt(s): This case is a continuation of application Ser. No. 09/605,747, filed Jun. 29, 2000. Seborrheic dermatitis, also known as **seborrheic eczema** and **seborrhea**, is a chronic superficial inflammatory disease of the skin capable of affecting many parts of the body including the scalp, eyebrows, nasolabial creases, lips, ears, sternal area, axillae, submammary folds, umbilicus, groins, and gluteul crease. The disease is characterized by many shapes, sizes, and surface textures and is often crust-like, yellowish, and accompanied by itching. This is also characterized by remission and exacerbation. The etiology, pathogenesis and histology of **seborrheic dermatitis** is unresolved. However, it bears close clinical resemblance to psoriasis and many researchers are of the belief that both conditions share a related etiology, notwithstanding that psoriasis is a broader and less definable condition. Therein, psoriasis typically differentiates over **seborrheic dermatitis** in its absence of itching and its resistance treatment by compounds, such as, selenium sulfide and zinc pyrithione which have been employed in the treatment of seborrheic conditions.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

## • Methods for managing scalp conditions

Inventor(s): Murad, Howard; (Marina del Ray, CA)

Correspondence: Pennie & Edmonds Llp; 1667 K Street, N.W.; Washington; DC; 20006;

US

Patent Application Number: 20020009423

Date filed: August 3, 2001

Abstract: This application relates to a pharmaceutical composition for the prevention, treatment, and management of scalp conditions, such as dandruff, seborrheic

**dermatitis**, psoriasis, folliculitis, and hair thinning including a therapeutically effective amount of an acidic component of a hydroxyacid or tannic acid, or a pharmaceutically acceptable salt thereof. A preferred anti-dandruff composition and method of managing **dandruff** includes a therapeutically effective amount of the acid component, a vitamin A component, and an anti-growth agent. A preferred anti-hair thinning composition and method of managing thinning hair includes a therapeutically effective amount of the acidic component, a niacin component present in an amount sufficient to locally increase blood circulation, and a 5-.alpha. reductase inhibitor. The invention also relates to a method of treating chemically processed hair by administering to a patient an amount of an acidic component of a hydroxy acid or tannic acid, or a pharmaceutically acceptable salt thereof, in an amount sufficient to essentially close the cuticle and inhibit modification of the chemically processed hair.

Excerpt(s): This application relates to pharmaceutical compositions, as well as methods, to normalize skin for the prevention, treatment, and management of scalp conditions. Human skin is a composite material of the epidermis and the dermis. The topmost part of the epidermis is the stratum corneum. This layer is the stiffest layer of the skin, as well as the one most affected by the surrounding environment. Below the stratum corneum is the internal portion of the epidermis. Below the epidermis, the topmost layer of the dermis is the papillary dermis, which is made of relatively loose connective tissues that define the micro-relief of the skin. The reticular dermis, disposed beneath the papillary dermis, is tight, connective tissue that is spatially organized. The reticular dermis is also associated with coarse wrinkles. At the bottom of the dermis lies the subcutaneous layer. The principal functions of the skin include protection, excretion, secretion, absorption, thermoregulation, pigmentogenesis, accumulation, sensory perception, and regulation of immunological processes. These functions are detrimentally affected by, for example, dryness, yeast, and structural changes in the skin, such as due to aging and excessive sun exposure.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

### Novel 1,2,4-thiadiazolium derivatives as melanocortin receptor modulators

Inventor(s): Eisinger, Magdalena; (Demarest, NJ), Fitzpatrick, Louis J.; (Souderton, PA), Lee, Daniel H.; (Sudbury, MA), Pan, Kevin; (Phoenixville, PA), Plata-Salaman, Carlos; (Ambler, PA), Reitz, Allen B.; (Lansdale, PA), Smith-Swintosky, Virginia L.; (Hatfield, PA), Zhao, Boyu; (Lansdale, PA)

Correspondence: Audley A. Ciamporcero JR.; Johnson & Johnson; One Johnson & Johnson Plaza; New Brunswick; NJ; 08933-7003; US

Patent Application Number: 20030162819

Date filed: November 4, 2002

Abstract: The present invention is directed to novel 1,2,4-thiadiazol-2-ium derivatives useful as agonists or antagonists of the melanocortin receptor. More particularly, the compounds of the present invention are useful for the treatment of metabolic, CNS and dermatological disorders such as obesity, impaired oral glucose tolerance, elevated blood glucose levels, type II diabetes, Syndrome X, diabetic retinopathy, spinal cord injury, nerve injury, acute neurodegenerative disorders, chronic neurodegenerative disorders, plexopathies, male erectile dysfunction, dry eyes, acne, dry skin, aged skin, seborrheic dermatitis, rosacea, excessive ear wax, meibomian gland disorder, pseudofolliculitis, yeast infections, dandruff, hidradenitis suppurativa, ocular rosacea and eccrine gland disorder.

Excerpt(s): This application claims the benefit of U.S. Provisional Application No. 60/337,762, filed on Nov. 8, 2001, which is incorporated by reference herein in its entirety. The present invention provides novel 1,2,4-thiadiazol-2-ium derivatives useful for the treatment of a disorder mediated by a melanocortin receptor. More particularly, the compounds of the present invention are useful for the treatment of metabolic, CNS and dermatologic disorders such as obesity, impaired oral glucose tolerance, elevated blood glucose levels, type II diabetes, Syndrome X, diabetic retinopathy, acute neurodegenerative disorders, chronic neurodegenerative disorders, plexopathies, male erectile dysfunction, dry eyes, acne, dry skin, aged skin, seborrheic dermatitis, rosacea, excessive ear wax, meibomian gland disorder, pseudofolliculitis, yeast infections, dandruff, hiradenitis suppurativa, ocular rosacea and eccrine gland disorder. Melanocortins are neuropeptides that arise from pro-opiomelanocortin (POMC), which is most prevalently expressed in the arcuate nucleus of the hypothalamus, pituitary lobes, and the nucleus tractus solarius of the brainstem. [Gantz, I., et al., Molecular Cloning, Expression, and Gene Localization of a Fourth Melanocortin Receptor, J. Biolog. Chem., 1993, 268, 15174-15179.] These peptides include ACTH, alpha.-MSH, beta.-MSH, gamma.sub.1-3-MSH, and synthetic analogue NDP-.alpha.MSH (Wikberg, J E S, Melanocortin receptors: new opportunities in drug discovery, Exp. Opin. Ther. Patents, 2000, 11(1), 61-76).

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# • Shampoo containing a cationic polymer and anti-dandruff particles

Inventor(s): Johnson, Eric Scott; (Hamilton, OH), Royce, Douglas Allan; (Aurora, IN), Wells, Robert Lee; (Cincinnati, OH)

Correspondence: The Procter & Gamble Company; Intellectual Property Division; Winton Hill Technical Center - Box 161; 6110 Center Hill Avenue; Cincinnati; OH; 45224; US

Patent Application Number: 20030202952

Date filed: April 22, 2003

Abstract: The compositions of the present invention relate to improved shampoo compositions having from about from about 5 to about 50 weight percent of a detersive surfactant, at least about 0.1 weight percent of anti-dandruff particles, at least about 0.05 weight percent of a cationic polysaccharide polymer having a molecular weight of from about 10,000 to about 10,000,000 and a charge density from about 1.4 meq/gm to about 7.0 meq/gm, and at least about 20.0 weight percent of an aqueous carrier.

Excerpt(s): The application claims the benefit of U.S. Provisional application Serial No. 60/374,345 (Case 8909P), filed on Apr. 22, 2002. The present invention relates to a hair cleansing shampoo containing anti-dandruff particles. More specifically, it relates to a shampoo containing a cationic polymer having a charge density of at least 1.4 meq/g and anti-dandruff particles. Shampoo compositions for cleaning the hair which also contain anti-dandruff agents are well known. Among the preferred types of anti-dandruff agents are particulate, crystalline anti-dandruff agents, such as sulfur, selenium disulfide, and heavy metal salts of pyridinethione. These particulates relieve dandruff symptoms when they are deposited on the scalp in the course of using the shampoo. Therefore, it is highly desirable to have rinse-off shampoo compositions capable of depositing an effective level of anti-dandruff particles to the scalp.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

### Shampoos providing a superior combination anti-dandruff efficacy and condition

Inventor(s): Boyd, Roberta Atwood; (Cincinnati, OH), Dunlop, David Scott; (Mason, OH), Guskey, Susan Marie; (Montgomery, OH), Marchetta, Anthony Raymond; (Mason, OH), Schwartz, James Roberts; (Cincinnati, OH)

Correspondence: The Procter & Gamble Company; Patent Division; Ivorydale Technical Center - Box 474; 5299 Spring Grove Avenue; Cincinnati; OH; 45217; US

Patent Application Number: 20020102228

Date filed: April 25, 2000

Abstract: Disclosed are shampoo compositions that provide a superior combination of anti-dandruff efficacy and conditioning, and a method of cleansing and conditioning the hair comprising applying to the hair and scalp an amount of said compositions. The anti-dandruff and conditioning shampoos comprise: (A) from about 5% to about 50%, by weight, of an anionic surfactant; (B) from about 0.01% to about 10%, by weight, of a non-volatile conditioning agent; (C) from about 0.1% to about 4%, by weight, of an anti-dandruff agent; (D) from about 0.02% to about 5%, by weight, of at least one cationic polymer; and (E) water. The compositions (A) have a bioavailability/coverage index value, as defined herein, of at least about 1.25; (B) have a first conditioning index value, as defined herein, of at least about 1.5; and (D) have a minimal inhibitory concentration index value, as defined herein, of at least about 0.125.

Excerpt(s): The present invention relates to shampoo compositions which provide a superior combination of anti-dandruff efficacy and conditioning. These compositions contain anionic surfactants, conditioning agents, anti-dandruff agents, cationic polymers, and water. These anti-dandruff and conditioning shampoo compositions exhibit (a) at least a certain bioavailability/coverage index value, (b) less than or equal to a certain first conditioning index value, (c) at least a certain second conditioning index value, and (d) at least a certain minimal inhibitory concentration index value, as defined herein. Shampoo compositions comprising various combinations of detersive surfactants and conditioning agents, especially silicone conditioning agents, are known in the art and are commercially available. Many of these compositions have been found to provide excellent hair cleansing and conditioning performance. For example, Pantene.RTM. Shampoo Plus Pro-Vitamin Conditioner-in-One formulas which contain anionic surfactants, a cationic polymer and silicone conditioning agents provide excellent cleaning, conditioning and hair feel benefits upon application to hair. Antidandruff shampoos are also well known in the art and are also commercially available. Anti-dandruff shampoos typically incorporate an anti-dandruff active and detersive surfactants. Among the preferred type of anti-dandruff agents are particulate, crystalline anti-dandruff agents, such as sulfur, selenium disulfide and heavy metal salts of pyridinethione. Soluble anti-dandruff agents, such as ketoconazole, are also known in the art.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

### • Topical treatment for skin irritation

Inventor(s): Pesacreta, Thomas C.; (Lafayette, LA)

Correspondence: William W. Stagg; Attorney-at-law; Durio, Mcgoffin & Stagg; P.O. Box

51308; Lafayette; LA; 70505-1308; US

Patent Application Number: 20030228374

Date filed: June 7, 2002

Abstract: The present invention comprises a method and composition for treating skin disorders such as **seborrheic dermatitis** of the scalp, **dandruff**, and psoriasis. The method includes topically applying to the skin a solution containing a treatment composition comprising one or more types of alkaline buffers such as bicarbonate, carbonate, dibasic phosphate, and tribasic phosphate having a pH in the range of about 7.1 to about 10.8 and a cation such as potassium or sodium serving as a counter ion. The treatment composition is delivered in a pharmaceutically acceptable vehicle at concentrations that vary according to both the severity of the skin disorder, the buffer vehicle, and the ingredients themselves. This biologically benign treatment has been found to efficiently and very quickly treat several types of skin disorders, including but not limited to the redness, **dandruff** and itching that can occur following skin cleansing with soap.

Excerpt(s): The present invention is generally related to the treatment of skin irritations and more particularly to the topical treatment of seborrheic dermatitis, dandruff, and psoriasis or similar skin conditions with an alkaline buffer solution. Many patents have been granted that purport to address the treatment of a group of skin ailments that include seborrheic dermatitis, dandruff, and some types of psoriasis such as scalp psoriasis. The link between these diseases is that they have several symptoms in common including skin loss (i.e. flaking), itching and, especially in the case of scalp psoriasis and **seborrheic dermatitis**, redness of the skin. Although significant time and research has been directed toward curing these ailments only limited success has been achieved. The symptoms of seborrheic dermatitis, dandruff, or psoriasis continue to represent a significant daily psychological and physiological irritation for millions of people, and a significant market for pharmaceutical companies. Part of the reason that treatments have been ineffective is that the causes of these disorders are unknown. Psoriasis has been correlated with the presence of certain types of bacteria. Seborrheic dermatitis and dandruff have been correlated with the presence of fungi. However, in none of these cases has the cause of the symptoms been unequivocally established. While some treatments are effective for some individuals, other individuals have chronic symptoms that are resistant to treatment.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

#### Treatment of dandruff

Inventor(s): Bailey, Peter Lawrence; (Wirral, GB), Harding, Clive Roderick; (Bedford, GB), Little, Christopher John; (Wirral, GB)

Correspondence: Unilever; Patent Department; 45 River Road; Edgewater; NJ; 07020; US

Patent Application Number: 20020168327

Date filed: February 26, 2002

Abstract: Dandruff and symptoms of **dandruff** can be treated using lipophilic agents or lipid precursor and/or promoters to strengthen the scalp. The lipophilic agents or lipid precursor and/or promoters are preferably used in conjunction with an antifungal agent which has activity against Malassezia spp, particularly Malassezia furfur. Suitable antifungal agents include those conventionally used for the treatment of **dandruff** including, for example, zinc pyrithrone (ZnPTO), octopirox and azole antifungal agents such as climbazole and ketocanazole. The antifungal agents may be used singularly or as a mixture of one or more antifungal agents.

Excerpt(s): This invention relates to the treatment and/or prevention of **dandruff** and symptoms of **dandruff**. In particular, the invention relates to the use of a class of compounds for treating **dandruff**, for strengthening the scalp and for reducing scalp itch and/or dryness. It is widely believed that Malassezia yeasts, such as Malassezia furfur, are the main cause of **dandruff**. However, it is unclear why some people suffer from this condition while others do not. What is known is that increasing the level of Malassezia on the scalp does not automatically lead to **dandruff**. This suggests that Malassezia is necessary but not sufficient to cause the condition. The main, if not only, intervention strategy used on the market currently for the treatment of **dandruff** is the topical application of antifungals such as zinc pyrithione (ZnPTO), octopirox, climbazole and ketoconazole which are normally delivered from a shampoo. These antifungal agents remove (or at least reduce the level of) the Malassezia from the scalp, and provide moderately effective treatment of the **dandruff** condition.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

### • Use of 1-hydroxy-2-pyridones for the treatment of seborrheic dermatitis

Inventor(s): Bohn, Manfred; (Hofheim, DE), Kraemer, Karl Theodor; (Langen, DE), Markus, Astrid; (Liederbach, DE)

Correspondence: Finnegan, Henderson, Farabow, Garrett & Dunner; Llp; 1300 I Street, NIW: Weshington: DC: 20005: LIS

NW; Washington; DC; 20005; US

Patent Application Number: 20040039030

Date filed: June 26, 2003

Abstract: Compounds of the formula (I) are disclosed and are suitable for the treatment of **seborrheic dermatitis.** 1

Excerpt(s): Seborrheic dermatitis is understood as meaning a disorder of the scalp which differs from simple **dandruff** by the presence of erythema as a sign of inflammation, by the greater degree of scaling with occasional itching and burning, and by the occurrence of eczematous changes to other body sites. It can occur in the form of patches, but also more frequently affects the whole scalp and often includes, beyond the hairline, the forehead, around the neck and the ears. In severe cases, the scalp can have a secondary infection, and the changes can then exhibit a spongy consistency, vesicle and crust formation and can weep. Seborrheic dermatitis frequently occurs even in infancy and usually remits spontaneously at an age of 8-12 months. The scalp changes consisting of erythema, scaling and occasionally vesicles and crusts in infants can regress spontaneously within a few weeks, intermittently reoccur or persist during the entire childhood. They are frequently combined with a similar. process around the eyelids, nose and ears. Later, the condition usually occurs after puberty and can last for the whole life or even increase in strength. Approximately 1-3% of the population are affected by this illness. It is known that 1-hydroxy-2-pyridones and their salts exhibit

activity against normal **dandruff** which is characterized by a clinically noninflammatory scaling of the scalp occurring in nearly all people (DE 22 34 009).

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# • Use of nanoscale active anti-dandruff ingredients

Inventor(s): Eggers, Anke; (Duesseldorf, DE), Hensen, Hermann; (Haan, DE), Seipel, Werner; (Hilden, DE)

Correspondence: Cognis Corporation; 2500 Renaissance BLVD., Suite 200; Gulph Mills;

PA; 19406

Patent Application Number: 20030003070

Date filed: June 18, 2002

Abstract: The invention relates to nanoscale active anti-dandruff ingredients having a particle diameter ranging from 10-500 nm in the production of hair-cosmetic preparations.

Excerpt(s): This invention relates generally to nanoparticles and more particularly to the use of nanoscale antidandruff agents in hair-care preparations. Various hair-care preparations containing antidandruff agents are known from the prior art. However, the effect of these antidandruff agents is always associated with their distribution on the scalp and the rate at which the compounds are incorporated and absorbed. So far as the compounds hitherto available are concerned, there is considerable potential for improvement in this regard. Accordingly, the problem addressed by the present invention was to accelerate the uptake of antidandruff agents during their application by providing new supply forms. In addition, they would have a long-lasting effect after application and good dermatological compatibility and would be distinguished by excellent stability during storage at elevated temperature.

Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

# **Keeping Current**

In order to stay informed about patents and patent applications dealing with seborrheic dermatitis, you can access the U.S. Patent Office archive via the Internet at the following Web address: http://www.uspto.gov/patft/index.html. You will see two broad options: (1) Issued Patent, and (2) Published Applications. To see a list of issued patents, perform the following steps: Under "Issued Patents," click "Quick Search." Then, type "seborrheic dermatitis" (or synonyms) into the "Term 1" box. After clicking on the search button, scroll down to see the various patents which have been granted to date on seborrheic dermatitis.

You can also use this procedure to view pending patent applications concerning seborrheic dermatitis. Simply go back to <a href="http://www.uspto.gov/patft/index.html">http://www.uspto.gov/patft/index.html</a>. Select "Quick Search" under "Published Applications." Then proceed with the steps listed above.

# CHAPTER 4. BOOKS ON SEBORRHEIC DERMATITIS

# Overview

This chapter provides bibliographic book references relating to seborrheic dermatitis. In addition to online booksellers such as **www.amazon.com** and **www.bn.com**, excellent sources for book titles on seborrheic dermatitis include the Combined Health Information Database and the National Library of Medicine. Your local medical library also may have these titles available for loan.

# **Chapters on Seborrheic Dermatitis**

In order to find chapters that specifically relate to seborrheic dermatitis, an excellent source of abstracts is the Combined Health Information Database. You will need to limit your search to book chapters and seborrheic dermatitis using the "Detailed Search" option. Go to the following hyperlink: http://chid.nih.gov/detail/detail.html. To find book chapters, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Book Chapter." Type "seborrheic dermatitis" (or synonyms) into the "For these words:" box. The following is a typical result when searching for book chapters on seborrheic dermatitis:

# • Chapter 126: Seborrheic Dermatitis

Source: in Freedberg, I.M., et al., eds. Fitzpatrick's Dermatology in General Medicine. 5th ed., Vol. 1. New York, NY: McGraw-Hill. 1999. p. 1482-1489.

Contact: Available from McGraw-Hill Customer Services. P.O. Box 548, Blacklick, OH 43004-0548. (800) 262-4729 or (877) 833-5524. Fax (614) 759-3749 or (614) 759-3641. E-mail: customer.service@mcgraw-hill.com. PRICE: \$395.00 plus shipping and handling. ISBN: 0070219435.

Summary: This chapter provides health professionals with information on the incidence, etiology, pathogenesis, histopathology, clinical features, and treatment of **seborrheic dermatitis**. This common, chronic papulosquamous dermatosis, which affects both infants and adults, is often associated with increased sebum production of the scalp and the sebaceous follicle-rich areas of the face and trunk. The age peaks for **seborrheic dermatitis** are during the first 3 months of life and around the fourth to seventh decade

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of life. Men are affected more often than women in all age groups, but there does not appear to be any racial predilection. **Seborrheic dermatitis** is one of the most common diseases associated with human immunodeficiency infection. Although many theories exist, the cause of **seborrheic dermatitis** remains unknown. Suggested causes of **seborrheic dermatitis** have focused on increased sebum secretion, bacteria and yeasts, drugs, neurotransmitter abnormalities, environmental factors, aberrant epidermal proliferation, and nutritional disorders. The histologic features vary according to the stage of the disease, and the clinical picture and course of the disease differ in adults and infants. In general, therapy is directed toward loosening and removing scales and crusts, inhibiting yeast colonization, controlling secondary infection, and reducing erythema and itching. The chapter highlights therapies for the scalp and intertriginous areas in infants and the scalp, face, and trunk in adults. Other topics include immunodeficiency, psoriasis, and pityriasis aminantacea in relation to **seborrheic dermatitis** and the treatment of seborrheic otitis externa, seborrheic blepharitis, and pityriasis aminantacea. 6 figures, 2 tables, and 47 references.

## CHAPTER 5. PERIODICALS AND NEWS ON SEBORRHEIC DERMATITIS

#### Overview

In this chapter, we suggest a number of news sources and present various periodicals that cover seborrheic dermatitis.

#### **News Services and Press Releases**

One of the simplest ways of tracking press releases on seborrheic dermatitis is to search the news wires. In the following sample of sources, we will briefly describe how to access each service. These services only post recent news intended for public viewing.

#### PR Newswire

To access the PR Newswire archive, simply go to http://www.prnewswire.com/. Select your country. Type "seborrheic dermatitis" (or synonyms) into the search box. You will automatically receive information on relevant news releases posted within the last 30 days. The search results are shown by order of relevance.

#### **Reuters Health**

The Reuters' Medical News and Health eLine databases can be very useful in exploring news archives relating to seborrheic dermatitis. While some of the listed articles are free to view, others are available for purchase for a nominal fee. To access this archive, go to <a href="http://www.reutershealth.com/en/index.html">http://www.reutershealth.com/en/index.html</a> and search by "seborrheic dermatitis" (or synonyms). The following was recently listed in this archive for seborrheic dermatitis:

• Connetics submits seborrheic dermatitis treatment application to FDA

Source: Reuters Industry Breifing

Date: July 02, 2003

#### Pityrosporum Ovale Implicated In Seborrheic Dermatitis

Source: Reuters Medical News

Date: July 26, 1996

#### The NIH

Within MEDLINEplus, the NIH has made an agreement with the New York Times Syndicate, the AP News Service, and Reuters to deliver news that can be browsed by the public. Search news releases at <a href="http://www.nlm.nih.gov/medlineplus/alphanews\_a.html">http://www.nlm.nih.gov/medlineplus/alphanews\_a.html</a>. MEDLINEplus allows you to browse across an alphabetical index. Or you can search by date at the following Web page: <a href="http://www.nlm.nih.gov/medlineplus/newsbydate.html">http://www.nlm.nih.gov/medlineplus/newsbydate.html</a>. Often, news items are indexed by MEDLINEplus within its search engine.

#### **Business Wire**

Business Wire is similar to PR Newswire. To access this archive, simply go to http://www.businesswire.com/. You can scan the news by industry category or company name.

#### Market Wire

Market Wire is more focused on technology than the other wires. To browse the latest press releases by topic, such as alternative medicine, biotechnology, fitness, healthcare, legal, nutrition, and pharmaceuticals, access Market Wire's Medical/Health channel at <a href="http://www.marketwire.com/mw/release\_index?channel=MedicalHealth">http://www.marketwire.com/mw/release\_index?channel=MedicalHealth</a>. Or simply go to Market Wire's home page at <a href="http://www.marketwire.com/mw/home">http://www.marketwire.com/mw/home</a>, type "seborrheic dermatitis" (or synonyms) into the search box, and click on "Search News." As this service is technology oriented, you may wish to use it when searching for press releases covering diagnostic procedures or tests.

## **Search Engines**

Medical news is also available in the news sections of commercial Internet search engines. See the health news page at Yahoo (http://dir.yahoo.com/Health/News\_and\_Media/), or you can use this Web site's general news search page at http://news.yahoo.com/. Type in "seborrheic dermatitis" (or synonyms). If you know the name of a company that is relevant to seborrheic dermatitis, you can go to any stock trading Web site (such as http://www.etrade.com/) and search for the company name there. News items across various news sources are reported on indicated hyperlinks. Google offers a similar service at http://news.google.com/.

#### **BBC**

Covering news from a more European perspective, the British Broadcasting Corporation (BBC) allows the public free access to their news archive located at <a href="http://www.bbc.co.uk/">http://www.bbc.co.uk/</a>. Search by "seborrheic dermatitis" (or synonyms).

#### **Newsletter Articles**

Use the Combined Health Information Database, and limit your search criteria to "newsletter articles." Again, you will need to use the "Detailed Search" option. Go directly to the following hyperlink: http://chid.nih.gov/detail/detail.html. Go to the bottom of the search page where "You may refine your search by." Select the dates and language that you prefer. For the format option, select "Newsletter Article." Type "seborrheic dermatitis" (or synonyms) into the "For these words:" box. You should check back periodically with this database as it is updated every three months. The following is a typical result when searching for newsletter articles on seborrheic dermatitis:

## • Facial Skin Requires Gentle Psoriasis Treatments

Source: National Psoriasis Foundation Bulletin. 27(5):4; September/October 1996.

Contact: National Psoriasis Foundation. 6600 SW 92nd Avenue, Suite 300, Portland, OR 97223-7195. (503)244-7404. Fax (503)245-0626.

Summary: This newsletter article for individuals with psoriasis discusses treatment of psoriasis that occurs on the face. Topical steroids must be used with caution on the face because they can thin already delicate skin. Dovonex is not recommended for the central face because it can be irritating, but it can be used around the hairline. Treating psoriasis on the eyelids may involve washing the lid margins and eye lashes with tap water and baby shampoo, applying emollients, and using special ophthalmic steroid medication if necessary. The relationship between **seborrheic dermatitis** and facial psoriasis is also discussed.

## Academic Periodicals covering Seborrheic Dermatitis

Numerous periodicals are currently indexed within the National Library of Medicine's PubMed database that are known to publish articles relating to seborrheic dermatitis. In addition to these sources, you can search for articles covering seborrheic dermatitis that have been published by any of the periodicals listed in previous chapters. To find the latest studies published, go to <a href="http://www.ncbi.nlm.nih.gov/pubmed">http://www.ncbi.nlm.nih.gov/pubmed</a>, type the name of the periodical into the search box, and click "Go."

If you want complete details about the historical contents of a journal, you can also visit the following Web site: <a href="http://www.ncbi.nlm.nih.gov/entrez/jrbrowser.cgi">http://www.ncbi.nlm.nih.gov/entrez/jrbrowser.cgi</a>. Here, type in the name of the journal or its abbreviation, and you will receive an index of published articles. At <a href="http://locatorplus.gov/">http://locatorplus.gov/</a>, you can retrieve more indexing information on medical periodicals (e.g. the name of the publisher). Select the button "Search LOCATORplus." Then type in the name of the journal and select the advanced search option "Journal Title Search."

## CHAPTER 6. RESEARCHING MEDICATIONS

#### Overview

While a number of hard copy or CD-ROM resources are available for researching medications, a more flexible method is to use Internet-based databases. Broadly speaking, there are two sources of information on approved medications: public sources and private sources. We will emphasize free-to-use public sources.

## U.S. Pharmacopeia

Because of historical investments by various organizations and the emergence of the Internet, it has become rather simple to learn about the medications recommended for seborrheic dermatitis. One such source is the United States Pharmacopeia. In 1820, eleven physicians met in Washington, D.C. to establish the first compendium of standard drugs for the United States. They called this compendium the U.S. Pharmacopeia (USP). Today, the USP is a non-profit organization consisting of 800 volunteer scientists, eleven elected officials, and 400 representatives of state associations and colleges of medicine and pharmacy. The USP is located in Rockville, Maryland, and its home page is located at http://www.usp.org/. The USP currently provides standards for over 3,700 medications. The resulting USP DI® Advice for the Patient® can be accessed through the National Library of Medicine of the National Institutes of Health. The database is partially derived from lists of federally approved medications in the Food and Drug Administration's (FDA) Drug Approvals database, located at http://www.fda.gov/cder/da/da.htm.

While the FDA database is rather large and difficult to navigate, the Phamacopeia is both user-friendly and free to use. It covers more than 9,000 prescription and over-the-counter medications. To access this database, simply type the following hyperlink into your Web browser: http://www.nlm.nih.gov/medlineplus/druginformation.html. To view examples of a given medication (brand names, category, description, preparation, proper use, precautions, side effects, etc.), simply follow the hyperlinks indicated within the United States Pharmacopeia (USP).

Below, we have compiled a list of medications associated with seborrheic dermatitis. If you would like more information on a particular medication, the provided hyperlinks will direct you to ample documentation (e.g. typical dosage, side effects, drug-interaction risks, etc.).

The following drugs have been mentioned in the Pharmacopeia and other sources as being potentially applicable to seborrheic dermatitis:

#### Ciclopirox

• Topical - U.S. Brands: Loprox http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202140.html

#### Coal Tar

 Topical - U.S. Brands: Alphosyl; Aquatar; Estar; Fototar; Lavatar; Medotar; Psorigel; Taraphilic; Tarbonis http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202158.html

#### Corticosteroids

- **Dental U.S. Brands:** Kenalog in Orabase; Orabase-HCA; Oracort; Oralone http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202010.html
- Inhalation U.S. Brands: AeroBid; AeroBid-M; Azmacort; Beclovent; Decadron Respihaler; Pulmicort Respules; Pulmicort Turbuhaler; Vanceril; Vanceril 84 mcg Double Strength
  - http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202011.html
- Nasal U.S. Brands: Beconase; Beconase AQ; Dexacort Turbinaire; Flonase; Nasacort; Nasacort AQ; Nasalide; Nasarel; Nasonex; Rhinocort; Vancenase; Vancenase AQ 84 mcg; Vancenase pockethaler http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202012.html
- Ophthalmic U.S. Brands: AK-Dex; AK-Pred; AK-Tate; Baldex; Decadron; Dexair; Dexotic; Econopred; Econopred Plus; Eflone; Flarex; Fluor-Op; FML Forte; FML Liquifilm; FML S.O.P.; HMS Liquifilm; Inflamase Forte; Inflamase Mild; I-Pred; Lite Pred; Maxidex; Ocu-Dex; Ocu-Pred http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202013.html
- Otic U.S. Brands: Decadron http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202014.html
- Rectal U.S. Brands: Anucort-HC; Anu-Med HC; Anuprep HC; Anusol-HC; Anutone-HC; Anuzone-HC; Cort-Dome; Cortenema; Cortifoam; Hemorrhoidal HC; Hemril-HC Uniserts; Proctocort; Proctosol-HC; Rectosol-HC http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/203366.html

#### **Pyrithione**

• Topical - U.S. Brands: Sebulon; XSeb; Zincon http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202495.html

#### Resorcinol

• Topical - U.S. Brands: RA http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202507.html

## Salicylic Acid

• **Topical - U.S. Brands:** Antinea; Duofilm; Freezone; Gordofilm; Hydrisalic; Keralyt; Lactisol; Mediplast; P&S; Paplex; Salac; Salacid; Saligel; Salonil; Sebucare; Trans-Plantar; Trans-Ver-Sal; Viranol http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202516.html

#### Salicylic Acid and Sulfur

Topical - U.S. Brands: Meted; Sebex http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202517.html

#### Salicylic Acid, Sulfur, and Coal Tar

**Topical - U.S. Brands:** Sebutone; Vanseb-T http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202518.html

#### Selenium Sulfide

Topical - U.S. Brands: Glo-Sel; Selsun http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202520.html

#### Sulfur

Topical - U.S. Brands: Finac; Sulpho-Lac http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202543.html

#### **Commercial Databases**

In addition to the medications listed in the USP above, a number of commercial sites are available by subscription to physicians and their institutions. Or, you may be able to access these sources from your local medical library.

#### Mosby's Drug Consult<sup>TM</sup>

Mosby's Drug Consult™ database (also available on CD-ROM and book format) covers 45,000 drug products including generics and international brands. It provides prescribing information, drug interactions, and patient information. Subscription information is available at the following hyperlink: http://www.mosbysdrugconsult.com/.

#### **PDR**health

The PDRhealth database is a free-to-use, drug information search engine that has been written for the public in layman's terms. It contains FDA-approved drug information adapted from the Physicians' Desk Reference (PDR) database. PDR health can be searched by brand name, generic name, or indication. It features multiple drug interactions reports. Search PDR*health* at http://www.pdrhealth.com/drug info/index.html.

#### Other Web Sites

Drugs.com (www.drugs.com) reproduces the information in the Pharmacopeia as well as commercial information. You may also want to consider the Web site of the Medical Letter, Inc. (http://www.medletter.com/) which allows users to download articles on various drugs and therapeutics for a nominal fee.

If you have any questions about a medical treatment, the FDA may have an office near you. Look for their number in the blue pages of the phone book. You can also contact the FDA

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through its toll-free number, 1-888-INFO-FDA (1-888-463-6332), or on the World Wide Web at  $\mathbf{www.fda.gov}$ .

# **APPENDICES**

## APPENDIX A. PHYSICIAN RESOURCES

#### Overview

In this chapter, we focus on databases and Internet-based guidelines and information resources created or written for a professional audience.

#### **NIH Guidelines**

Commonly referred to as "clinical" or "professional" guidelines, the National Institutes of Health publish physician guidelines for the most common diseases. Publications are available at the following by relevant Institute<sup>10</sup>:

- Office of the Director (OD); guidelines consolidated across agencies available at http://www.nih.gov/health/consumer/conkey.htm
- National Institute of General Medical Sciences (NIGMS); fact sheets available at http://www.nigms.nih.gov/news/facts/
- National Library of Medicine (NLM); extensive encyclopedia (A.D.A.M., Inc.) with guidelines: http://www.nlm.nih.gov/medlineplus/healthtopics.html
- National Cancer Institute (NCI); guidelines available at http://www.cancer.gov/cancerinfo/list.aspx?viewid=5f35036e-5497-4d86-8c2c-714a9f7c8d25
- National Eye Institute (NEI); guidelines available at http://www.nei.nih.gov/order/index.htm
- National Heart, Lung, and Blood Institute (NHLBI); guidelines available at http://www.nhlbi.nih.gov/guidelines/index.htm
- National Human Genome Research Institute (NHGRI); research available at http://www.genome.gov/page.cfm?pageID=10000375
- National Institute on Aging (NIA); guidelines available at http://www.nia.nih.gov/health/

 $<sup>^{10}</sup>$  These publications are typically written by one or more of the various NIH Institutes.

- National Institute on Alcohol Abuse and Alcoholism (NIAAA); guidelines available at http://www.niaaa.nih.gov/publications/publications.htm
- National Institute of Allergy and Infectious Diseases (NIAID); guidelines available at <a href="http://www.niaid.nih.gov/publications/">http://www.niaid.nih.gov/publications/</a>
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS); fact sheets and guidelines available at <a href="http://www.niams.nih.gov/hi/index.htm">http://www.niams.nih.gov/hi/index.htm</a>
- National Institute of Child Health and Human Development (NICHD); guidelines available at http://www.nichd.nih.gov/publications/pubskey.cfm
- National Institute on Deafness and Other Communication Disorders (NIDCD); fact sheets and guidelines at <a href="http://www.nidcd.nih.gov/health/">http://www.nidcd.nih.gov/health/</a>
- National Institute of Dental and Craniofacial Research (NIDCR); guidelines available at http://www.nidr.nih.gov/health/
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); guidelines available at http://www.niddk.nih.gov/health/health.htm
- National Institute on Drug Abuse (NIDA); guidelines available at http://www.nida.nih.gov/DrugAbuse.html
- National Institute of Environmental Health Sciences (NIEHS); environmental health information available at http://www.niehs.nih.gov/external/facts.htm
- National Institute of Mental Health (NIMH); guidelines available at http://www.nimh.nih.gov/practitioners/index.cfm
- National Institute of Neurological Disorders and Stroke (NINDS); neurological disorder information pages available at http://www.ninds.nih.gov/health\_and\_medical/disorder\_index.htm
- National Institute of Nursing Research (NINR); publications on selected illnesses at http://www.nih.gov/ninr/news-info/publications.html
- National Institute of Biomedical Imaging and Bioengineering; general information at http://grants.nih.gov/grants/becon/becon\_info.htm
- Center for Information Technology (CIT); referrals to other agencies based on keyword searches available at <a href="http://kb.nih.gov/www\_query\_main.asp">http://kb.nih.gov/www\_query\_main.asp</a>
- National Center for Complementary and Alternative Medicine (NCCAM); health information available at http://nccam.nih.gov/health/
- National Center for Research Resources (NCRR); various information directories available at http://www.ncrr.nih.gov/publications.asp
- Office of Rare Diseases; various fact sheets available at http://rarediseases.info.nih.gov/html/resources/rep\_pubs.html
- Centers for Disease Control and Prevention; various fact sheets on infectious diseases available at http://www.cdc.gov/publications.htm

#### NIH Databases

In addition to the various Institutes of Health that publish professional guidelines, the NIH has designed a number of databases for professionals.<sup>11</sup> Physician-oriented resources provide a wide variety of information related to the biomedical and health sciences, both past and present. The format of these resources varies. Searchable databases, bibliographic citations, full-text articles (when available), archival collections, and images are all available. The following are referenced by the National Library of Medicine:12

- Bioethics: Access to published literature on the ethical, legal, and public policy issues surrounding healthcare and biomedical research. This information is provided in conjunction with the Kennedy Institute of Ethics located at Georgetown University, Washington, D.C.: http://www.nlm.nih.gov/databases/databases\_bioethics.html
- HIV/AIDS Resources: Describes various links and databases dedicated to HIV/AIDS research: http://www.nlm.nih.gov/pubs/factsheets/aidsinfs.html
- NLM Online Exhibitions: Describes "Exhibitions in the History of Medicine": http://www.nlm.nih.gov/exhibition/exhibition.html. Additional resources for historical scholarship in medicine: http://www.nlm.nih.gov/hmd/hmd.html
- Biotechnology Information: Access to public databases. The National Center for Biotechnology Information conducts research in computational biology, develops software tools for analyzing genome data, and disseminates biomedical information for the better understanding of molecular processes affecting human health and disease: http://www.ncbi.nlm.nih.gov/
- Population Information: The National Library of Medicine provides access to worldwide coverage of population, family planning, and related health issues, including family planning technology and programs, fertility, and population law and policy: http://www.nlm.nih.gov/databases/databases\_population.html
- **Cancer Information:** Access to cancer-oriented databases: http://www.nlm.nih.gov/databases/databases\_cancer.html
- **Profiles in Science:** Offering the archival collections of prominent twentieth-century biomedical scientists to the public through modern digital http://www.profiles.nlm.nih.gov/
- Chemical Information: Provides links to various chemical databases and references: http://sis.nlm.nih.gov/Chem/ChemMain.html
- Clinical Alerts: Reports the release of findings from the NIH-funded clinical trials where such release could significantly affect morbidity http://www.nlm.nih.gov/databases/alerts/clinical\_alerts.html
- Space Life Sciences: Provides links and information to space-based research (including NASA): http://www.nlm.nih.gov/databases/databases\_space.html
- **MEDLINE:** Bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the healthcare system, and the pre-clinical sciences: http://www.nlm.nih.gov/databases/databases\_medline.html

<sup>&</sup>lt;sup>11</sup> Remember, for the general public, the National Library of Medicine recommends the databases referenced in MEDLINEplus (http://medlineplus.gov/ or http://www.nlm.nih.gov/medlineplus/databases.html).

<sup>&</sup>lt;sup>12</sup> See http://www.nlm.nih.gov/databases/databases.html.

- Toxicology and Environmental Health Information (TOXNET): Databases covering toxicology and environmental health: http://sis.nlm.nih.gov/Tox/ToxMain.html
- Visible Human Interface: Anatomically detailed, three-dimensional representations of normal male and female human bodies: http://www.nlm.nih.gov/research/visible/visible human.html

## The NLM Gateway<sup>13</sup>

The NLM (National Library of Medicine) Gateway is a Web-based system that lets users search simultaneously in multiple retrieval systems at the U.S. National Library of Medicine (NLM). It allows users of NLM services to initiate searches from one Web interface, providing one-stop searching for many of NLM's information resources or databases. To use the NLM Gateway, simply go to the search site at <a href="http://gateway.nlm.nih.gov/gw/Cmd">http://gateway.nlm.nih.gov/gw/Cmd</a>. Type "seborrheic dermatitis" (or synonyms) into the search box and click "Search." The results will be presented in a tabular form, indicating the number of references in each database category.

## **Results Summary**

Category	Items Found
Journal Articles	1898
Books / Periodicals / Audio Visual	23
Consumer Health	0
Meeting Abstracts	40
Other Collections	25
Total	1986

#### HSTAT<sup>15</sup>

HSTAT is a free, Web-based resource that provides access to full-text documents used in healthcare decision-making. These documents include clinical practice guidelines, quick-reference guides for clinicians, consumer health brochures, evidence reports and technology assessments from the Agency for Healthcare Research and Quality (AHRQ), as well as AHRQ's Put Prevention Into Practice. Simply search by "seborrheic dermatitis" (or synonyms) at the following Web site: http://text.nlm.nih.gov.

<sup>&</sup>lt;sup>13</sup> Adapted from NLM: http://gateway.nlm.nih.gov/gw/Cmd?Overview.x.

<sup>&</sup>lt;sup>14</sup> The NLM Gateway is currently being developed by the Lister Hill National Center for Biomedical Communications (LHNCBC) at the National Library of Medicine (NLM) of the National Institutes of Health (NIH).

<sup>&</sup>lt;sup>15</sup> Adapted from HSTAT: http://www.nlm.nih.gov/pubs/factsheets/hstat.html.

<sup>&</sup>lt;sup>16</sup> The HSTAT URL is http://hstat.nlm.nih.gov/.

<sup>&</sup>lt;sup>17</sup> Other important documents in HSTAT include: the National Institutes of Health (NIH) Consensus Conference Reports and Technology Assessment Reports; the HIV/AIDS Treatment Information Service (ATIS) resource documents; the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Treatment (SAMHSA/CSAT) Treatment Improvement Protocols (TIP) and Center for Substance Abuse Prevention (SAMHSA/CSAP) Prevention Enhancement Protocols System (PEPS); the Public Health Service (PHS) Preventive Services Task Force's *Guide to Clinical Preventive Services*; the independent, nonfederal Task Force on Community Services' *Guide to Community Preventive Services*; and the Health Technology Advisory Committee (HTAC) of the Minnesota Health Care Commission (MHCC) health technology evaluations.

#### Coffee Break: Tutorials for Biologists<sup>18</sup>

Coffee Break is a general healthcare site that takes a scientific view of the news and covers recent breakthroughs in biology that may one day assist physicians in developing treatments. Here you will find a collection of short reports on recent biological discoveries. Each report incorporates interactive tutorials that demonstrate how bioinformatics tools are used as a part of the research process. Currently, all Coffee Breaks are written by NCBI staff.19 Each report is about 400 words and is usually based on a discovery reported in one or more articles from recently published, peer-reviewed literature.<sup>20</sup> This site has new articles every few weeks, so it can be considered an online magazine of sorts. It is intended for general background information. You can access the Coffee Break Web site at the following hyperlink: http://www.ncbi.nlm.nih.gov/Coffeebreak/.

#### **Other Commercial Databases**

In addition to resources maintained by official agencies, other databases exist that are commercial ventures addressing medical professionals. Here are some examples that may interest you:

- CliniWeb International: Index and table of contents to selected clinical information on the Internet; see <a href="http://www.ohsu.edu/cliniweb/">http://www.ohsu.edu/cliniweb/</a>.
- Medical World Search: Searches full text from thousands of selected medical sites on the Internet; see <a href="http://www.mwsearch.com/">http://www.mwsearch.com/</a>.

 $<sup>^{18}\,</sup> A dapted from \ {\bf http://www.ncbi.nlm.nih.gov/Coffeebreak/Archive/FAQ.html}.$ 

<sup>&</sup>lt;sup>19</sup> The figure that accompanies each article is frequently supplied by an expert external to NCBI, in which case the source of the figure is cited. The result is an interactive tutorial that tells a biological story.

<sup>&</sup>lt;sup>20</sup> After a brief introduction that sets the work described into a broader context, the report focuses on how a molecular understanding can provide explanations of observed biology and lead to therapies for diseases. Each vignette is accompanied by a figure and hypertext links that lead to a series of pages that interactively show how NCBI tools and resources are used in the research process.

## APPENDIX B. PATIENT RESOURCES

## Overview

Official agencies, as well as federally funded institutions supported by national grants, frequently publish a variety of guidelines written with the patient in mind. These are typically called "Fact Sheets" or "Guidelines." They can take the form of a brochure, information kit, pamphlet, or flyer. Often they are only a few pages in length. Since new guidelines on seborrheic dermatitis can appear at any moment and be published by a number of sources, the best approach to finding guidelines is to systematically scan the Internet-based services that post them.

#### **Patient Guideline Sources**

The remainder of this chapter directs you to sources which either publish or can help you find additional guidelines on topics related to seborrheic dermatitis. Due to space limitations, these sources are listed in a concise manner. Do not hesitate to consult the following sources by either using the Internet hyperlink provided, or, in cases where the contact information is provided, contacting the publisher or author directly.

#### The National Institutes of Health

The NIH gateway to patients is located at http://health.nih.gov/. From this site, you can search across various sources and institutes, a number of which are summarized below.

#### **Topic Pages: MEDLINEplus**

The National Library of Medicine has created a vast and patient-oriented healthcare information portal called MEDLINEplus. Within this Internet-based system are "health topic pages" which list links to available materials relevant to seborrheic dermatitis. To access this system, log on to <a href="http://www.nlm.nih.gov/medlineplus/healthtopics.html">http://www.nlm.nih.gov/medlineplus/healthtopics.html</a>. From there you can either search using the alphabetical index or browse by broad topic areas. Recently, MEDLINEplus listed the following when searched for "seborrheic dermatitis":

#### Cosmetics

http://www.nlm.nih.gov/medlineplus/cosmetics.html

#### Dermatitis

http://www.nlm.nih.gov/medlineplus/dermatitis.html

#### Eczema

http://www.nlm.nih.gov/medlineplus/eczema.html

#### **Eye Diseases**

http://www.nlm.nih.gov/medlineplus/eyediseases.html

#### **Fungal Infections**

http://www.nlm.nih.gov/medlineplus/fungalinfections.html

#### Infant and Newborn Care

http://www.nlm.nih.gov/medlineplus/infantandnewborncare.html

#### Infant and Toddler Health

http://www.nlm.nih.gov/medlineplus/infantandtoddlerhealth.html

#### **Psoriasis**

http://www.nlm.nih.gov/medlineplus/psoriasis.html

#### **Skin Aging**

http://www.nlm.nih.gov/medlineplus/skinaging.html

#### **Skin Diseases**

http://www.nlm.nih.gov/medlineplus/skindiseases.html

You may also choose to use the search utility provided by MEDLINEplus at the following Web address: http://www.nlm.nih.gov/medlineplus/. Simply type a keyword into the search box and click "Search." This utility is similar to the NIH search utility, with the exception that it only includes materials that are linked within the MEDLINEplus system (mostly patient-oriented information). It also has the disadvantage of generating unstructured results. We recommend, therefore, that you use this method only if you have a very targeted search.

#### The Combined Health Information Database (CHID)

CHID Online is a reference tool that maintains a database directory of thousands of journal articles and patient education guidelines on seborrheic dermatitis. CHID offers summaries that describe the guidelines available, including contact information and pricing. CHID's general Web site is <a href="http://chid.nih.gov/">http://chid.nih.gov/</a>. To search this database, go to <a href="http://chid.nih.gov/detail/detail.html">http://chid.nih.gov/detail/detail.html</a>. In particular, you can use the advanced search options to look up pamphlets, reports, brochures, and information kits. The following was recently posted in this archive:

#### Seborrheic Dermatitis: What It Is and How to Treat It

Source: American Academy of Family Physicians. March 2002. 2 p.

Contact: Available from American Academy of Family Physicians. Website: www.familydoctor.org.

Summary: This fact sheet discusses the treatment of **seborrheic dermatitis**, a condition causing flaking of the skin. This condition generally occurs on the scalp and is known as

dandruff in adults and cradle cap when it affects babies. Shampoos that contain salicylic acid, selenium sulfide, or pyrithione zinc are used to treat seborrheic dermatitis of the scalp in adults and adolescents. Steroid lotions are used to treat the skin of adolescents and adults with this condition. For babies, a soft brush can be used to help loosen scalp flakes. In addition, a mild shampoo may be helpful. If these methods do not work, the doctor may prescribe a tar shampoo. Gentle steroid lotions are use to treat this condition in the skin creases of babies.

#### Seborrhea: What It Is and How To Treat It

Source: American Family Physician. 61(9): 2713-2714. May 1, 2000.

Contact: American Academy of Family Physicians. 11400 Tomahawk Creek Parkway, Leawood, KS 66211-2672. (800) 274-2237 or (913) 906-6000. E-mail: fp@aafp.org. Website: www.aafp.org.

Summary: This journal article uses a question and answer format to provide people who have seborrhea with information on the causes and treatment of this common skin problem. Seborrhea causes a red, itchy rash and white scales. Seborrhea may affect infants, adults, and the elderly. It occurs more frequently in people who have oily skin and in patients who have Parkinson's disease or acquired immune deficiency syndrome. Although the cause of **seborrheic dermatitis** is not completely understood, it is likely caused by several factors, including hormones, stress, and a yeast like organism. Treatment involves good hygiene. Seborrhea on the face and body improves with daily washing with soap and water, rest, and exercise. Medicated shampoos are used to treat dandruff and cradle cap. Other pharmacological preparations are available to control seborrhea.

#### Seborrheic Dermatitis

Source: Schaumburg, IL: American Academy of Dermatology. 1995. 6 p.

Contact: American Academy of Dermatology, 930 North Meacham Road, P.O. Box 4014, Schaumburg, IL 60168-4014.

Summary: This pamphlet for the general public uses a question-and-answer format to discuss seborrheic dermatitis, which is a common inflammation of areas of the skin having the greatest number of sebaceous glands. The pamphlet explains the differences between dandruff, seborrhea, and seborrheic dermatitis, and it identifies the individuals who are most susceptible to seborrheic dermatitis and the other diseases associated with this condition. In addition, the pamphlet discusses whether seborrheic dermatitis can be prevented, whether laboratory tests are useful in diagnosing this condition, and how this condition is treated. 3 photographs.

#### Living With Eczema: Seborrheic Dermatitis

Source: Portland, OR: National Eczema Association for Science and Education (NEASE). 1999.8 p.

Contact: Available from National Eczema Association for Science and Education (NEASE). 1220 SW Morrison, Suite 433, Portland, OR 97205. (800) 818-7546 or (503) 228-4430. Fax (503) 224-3363. E-mail: nease@teleport.com. Website: www.eczema-assn.org. PRICE: \$25.00 per 100, plus shipping and handling; contact for other quantities.

Summary: This patient education pamphlet, one of a series of educational pamphlets developed by the National Eczema Association for Science and Education (NEASE),

uses a question and answer format to provide people who have seborrheic dermatitis (SD) and their families with information on the etiology, symptoms, and treatment of this common skin disorder. This noncontagious condition, which causes flaking and redness of the skin, usually occurs when there is inflammation in areas of the skin where sebaceous glands are concentrated. Although the exact cause of SD is unknown, a yeast called Pityrosporum ovale may be a factor in its development. SD that occurs in infants is known as cradle cap. This condition is very common and usually responds well to simple treatment or clears up with no treatment within a few months after birth. In adults, SD is more common among the elderly, people who are immunocompromised, or people who have chronic neurological conditions. In addition, people who have had a traumatic medical crisis can also develop SD. There are differences between SD and other skin conditions such as dandruff, psoriasis, and eczema. Although SD cannot be prevented or cured, it can be treated and controlled. Treatment varies depending on the affected areas and the severity of the condition. Mild cases can be treated with medicated shampoos and nonprescription hydrocortisone cream. In more severe cases, prescription medications such as topical steroids may be needed.

#### Healthfinder<sup>TM</sup>

Healthfinder<sup>TM</sup> is sponsored by the U.S. Department of Health and Human Services and offers links to hundreds of other sites that contain healthcare information. This Web site is located at http://www.healthfinder.gov. Again, keyword searches can be used to find guidelines. The following was recently found in this database:

## Self-Care Flow Charts: Skin Rashes and Other Changes

Summary: An online chart of self-care suggestions for common skin rashes and skin changes. These include contact dermatitis, seborrhea, cradle cap, hives, insect bites, and cellulitis.

Source: American Academy of Family Physicians

http://www.healthfinder.gov/scripts/recordpass.asp?RecordType=0&RecordID=4800

#### The NIH Search Utility

The NIH search utility allows you to search for documents on over 100 selected Web sites that comprise the NIH-WEB-SPACE. Each of these servers is "crawled" and indexed on an ongoing basis. Your search will produce a list of various documents, all of which will relate in some way to seborrheic dermatitis. The drawbacks of this approach are that the information is not organized by theme and that the references are often a mix of information for professionals and patients. Nevertheless, a large number of the listed Web sites provide useful background information. We can only recommend this route, therefore, for relatively rare or specific disorders, or when using highly targeted searches. To use the NIH search utility, visit the following Web page: http://search.nih.gov/index.html.

#### **Additional Web Sources**

A number of Web sites are available to the public that often link to government sites. These can also point you in the direction of essential information. The following is a representative sample:

- AOL: http://search.aol.com/cat.adp?id=168&layer=&from=subcats
- Family Village: http://www.familyvillage.wisc.edu/specific.htm
- Google: http://directory.google.com/Top/Health/Conditions\_and\_Diseases/
- Med Help International: http://www.medhelp.org/HealthTopics/A.html
- Open Directory Project: http://dmoz.org/Health/Conditions\_and\_Diseases/
- Yahoo.com: http://dir.yahoo.com/Health/Diseases\_and\_Conditions/
- WebMD®Health: http://my.webmd.com/health\_topics

## **Finding Associations**

There are several Internet directories that provide lists of medical associations with information on or resources relating to seborrheic dermatitis. By consulting all of associations listed in this chapter, you will have nearly exhausted all sources for patient associations concerned with seborrheic dermatitis.

#### The National Health Information Center (NHIC)

The National Health Information Center (NHIC) offers a free referral service to help people find organizations that provide information about seborrheic dermatitis. For more information, see the NHIC's Web site at http://www.health.gov/NHIC/ or contact an information specialist by calling 1-800-336-4797.

#### **Directory of Health Organizations**

The Directory of Health Organizations, provided by the National Library of Medicine Specialized Information Services, is a comprehensive source of information on associations. The Directory of Health Organizations database can be accessed via the Internet at http://www.sis.nlm.nih.gov/Dir/DirMain.html. It is composed of two parts: DIRLINE and Health Hotlines.

The DIRLINE database comprises some 10,000 records of organizations, research centers, and government institutes and associations that primarily focus on health and biomedicine. To access DIRLINE directly, go to the following Web site: http://dirline.nlm.nih.gov/. Simply type in "seborrheic dermatitis" (or a synonym), and you will receive information on all relevant organizations listed in the database.

Health Hotlines directs you to toll-free numbers to over 300 organizations. You can access this database directly at http://www.sis.nlm.nih.gov/hotlines/. On this page, you are given the option to search by keyword or by browsing the subject list. When you have received your search results, click on the name of the organization for its description and contact information.

#### The Combined Health Information Database

Another comprehensive source of information on healthcare associations is the Combined Health Information Database. Using the "Detailed Search" option, you will need to limit your search to "Organizations" and "seborrheic dermatitis". Type the following hyperlink into your Web browser: <a href="http://chid.nih.gov/detail/detail.html">http://chid.nih.gov/detail/detail.html</a>. To find associations, use the drop boxes at the bottom of the search page where "You may refine your search by." For publication date, select "All Years." Then, select your preferred language and the format option "Organization Resource Sheet." Type "seborrheic dermatitis" (or synonyms) into the "For these words:" box. You should check back periodically with this database since it is updated every three months.

#### The National Organization for Rare Disorders, Inc.

The National Organization for Rare Disorders, Inc. has prepared a Web site that provides, at no charge, lists of associations organized by health topic. You can access this database at the following Web site: http://www.rarediseases.org/search/orgsearch.html. Type "seborrheic dermatitis" (or a synonym) into the search box, and click "Submit Query."

## APPENDIX C. FINDING MEDICAL LIBRARIES

## Overview

In this Appendix, we show you how to quickly find a medical library in your area.

## Preparation

Your local public library and medical libraries have interlibrary loan programs with the National Library of Medicine (NLM), one of the largest medical collections in the world. According to the NLM, most of the literature in the general and historical collections of the National Library of Medicine is available on interlibrary loan to any library. If you would like to access NLM medical literature, then visit a library in your area that can request the publications for you.<sup>21</sup>

### Finding a Local Medical Library

The quickest method to locate medical libraries is to use the Internet-based directory published by the National Network of Libraries of Medicine (NN/LM). This network includes 4626 members and affiliates that provide many services to librarians, health professionals, and the public. To find a library in your area, simply visit http://nnlm.gov/members/adv.html or call 1-800-338-7657.

#### Medical Libraries in the U.S. and Canada

In addition to the NN/LM, the National Library of Medicine (NLM) lists a number of libraries with reference facilities that are open to the public. The following is the NLM's list and includes hyperlinks to each library's Web site. These Web pages can provide information on hours of operation and other restrictions. The list below is a small sample of

<sup>&</sup>lt;sup>21</sup> Adapted from the NLM: http://www.nlm.nih.gov/psd/cas/interlibrary.html.

libraries recommended by the National Library of Medicine (sorted alphabetically by name of the U.S. state or Canadian province where the library is located)<sup>22</sup>:

- **Alabama:** Health InfoNet of Jefferson County (Jefferson County Library Cooperative, Lister Hill Library of the Health Sciences), **http://www.uab.edu/infonet/**
- Alabama: Richard M. Scrushy Library (American Sports Medicine Institute)
- **Arizona:** Samaritan Regional Medical Center: The Learning Center (Samaritan Health System, Phoenix, Arizona), http://www.samaritan.edu/library/bannerlibs.htm
- California: Kris Kelly Health Information Center (St. Joseph Health System, Humboldt), http://www.humboldt1.com/~kkhic/index.html
- California: Community Health Library of Los Gatos, http://www.healthlib.org/orgresources.html
- California: Consumer Health Program and Services (CHIPS) (County of Los Angeles Public Library, Los Angeles County Harbor-UCLA Medical Center Library) Carson, CA, http://www.colapublib.org/services/chips.html
- California: Gateway Health Library (Sutter Gould Medical Foundation)
- California: Health Library (Stanford University Medical Center), http://www-med.stanford.edu/healthlibrary/
- California: Patient Education Resource Center Health Information and Resources (University of California, San Francisco), http://sfghdean.ucsf.edu/barnett/PERC/default.asp
- California: Redwood Health Library (Petaluma Health Care District), http://www.phcd.org/rdwdlib.html
- California: Los Gatos PlaneTree Health Library, http://planetreesanjose.org/
- California: Sutter Resource Library (Sutter Hospitals Foundation, Sacramento), http://suttermedicalcenter.org/library/
- California: Health Sciences Libraries (University of California, Davis), http://www.lib.ucdavis.edu/healthsci/
- California: ValleyCare Health Library & Ryan Comer Cancer Resource Center (ValleyCare Health System, Pleasanton), http://gaelnet.stmarys-ca.edu/other.libs/gbal/east/vchl.html
- California: Washington Community Health Resource Library (Fremont), http://www.healthlibrary.org/
- Colorado: William V. Gervasini Memorial Library (Exempla Healthcare), http://www.saintjosephdenver.org/yourhealth/libraries/
- Connecticut: Hartford Hospital Health Science Libraries (Hartford Hospital), http://www.harthosp.org/library/
- Connecticut: Healthnet: Connecticut Consumer Health Information Center (University
  of Connecticut Health Center, Lyman Maynard Stowe Library),
  http://library.uchc.edu/departm/hnet/

<sup>&</sup>lt;sup>22</sup> Abstracted from http://www.nlm.nih.gov/medlineplus/libraries.html.

- **Connecticut:** Waterbury Hospital Health Center Library (Waterbury Hospital, Waterbury), http://www.waterburyhospital.com/library/consumer.shtml
- Delaware: Consumer Health Library (Christiana Care Health System, Eugene du Pont Preventive Medicine & Rehabilitation Institute, Wilmington), http://www.christianacare.org/health\_guide/health\_guide\_pmri\_health\_info.cfm
- Delaware: Lewis B. Flinn Library (Delaware Academy of Medicine, Wilmington), http://www.delamed.org/chls.html
- Georgia: Family Resource Library (Medical College of Georgia, Augusta), http://cmc.mcg.edu/kids\_families/fam\_resources/fam\_res\_lib/frl.htm
- Georgia: Health Resource Center (Medical Center of Central Georgia, Macon), http://www.mccg.org/hrc/hrchome.asp
- Hawaii: Hawaii Medical Library: Consumer Health Information Service (Hawaii Medical Library, Honolulu), http://hml.org/CHIS/
- Idaho: DeArmond Consumer Health Library (Kootenai Medical Center, Coeur d'Alene), http://www.nicon.org/DeArmond/index.htm
- Illinois: Health Learning Center of Northwestern Memorial Hospital (Chicago), http://www.nmh.org/health info/hlc.html
- Illinois: Medical Library (OSF Saint Francis Medical Center, Peoria), http://www.osfsaintfrancis.org/general/library/
- Kentucky: Medical Library Services for Patients, Families, Students & the Public (Central Baptist Hospital, Lexington), http://www.centralbap.com/education/community/library.cfm
- Kentucky: University of Kentucky Health Information Library (Chandler Medical Center, Lexington), http://www.mc.uky.edu/PatientEd/
- Louisiana: Alton Ochsner Medical Foundation Library (Alton Ochsner Medical Foundation, New Orleans), http://www.ochsner.org/library/
- Louisiana: Louisiana State University Health Sciences Center Medical Library-Shreveport, http://lib-sh.lsuhsc.edu/
- Maine: Franklin Memorial Hospital Medical Library (Franklin Memorial Hospital, Farmington), http://www.fchn.org/fmh/lib.htm
- Maine: Gerrish-True Health Sciences Library (Central Maine Medical Center, Lewiston), http://www.cmmc.org/library/library.html
- Maine: Hadley Parrot Health Science Library (Eastern Maine Healthcare, Bangor), http://www.emh.org/hll/hpl/guide.htm
- Maine: Maine Medical Center Library (Maine Medical Center, Portland), http://www.mmc.org/library/
- Maine: Parkview Hospital (Brunswick), http://www.parkviewhospital.org/
- Maine: Southern Maine Medical Center Health Sciences Library (Southern Maine Medical Center, Biddeford), http://www.smmc.org/services/service.php3?choice=10
- Maine: Stephens Memorial Hospital's Health Information Library (Western Maine Health, Norway), http://www.wmhcc.org/Library/

- Manitoba, Canada: Consumer & Patient Health Information Service (University of Manitoba Libraries),
   http://www.umanitoba.ca/libraries/units/health/reference/chis.html
- Manitoba, Canada: J.W. Crane Memorial Library (Deer Lodge Centre, Winnipeg), http://www.deerlodge.mb.ca/crane\_library/about.asp
- Maryland: Health Information Center at the Wheaton Regional Library (Montgomery County, Dept. of Public Libraries, Wheaton Regional Library), http://www.mont.lib.md.us/healthinfo/hic.asp
- Massachusetts: Baystate Medical Center Library (Baystate Health System), http://www.baystatehealth.com/1024/
- Massachusetts: Boston University Medical Center Alumni Medical Library (Boston University Medical Center), http://med-libwww.bu.edu/library/lib.html
- Massachusetts: Lowell General Hospital Health Sciences Library (Lowell General Hospital, Lowell), http://www.lowellgeneral.org/library/HomePageLinks/WWW.htm
- Massachusetts: Paul E. Woodard Health Sciences Library (New England Baptist Hospital, Boston), http://www.nebh.org/health\_lib.asp
- Massachusetts: St. Luke's Hospital Health Sciences Library (St. Luke's Hospital, Southcoast Health System, New Bedford), http://www.southcoast.org/library/
- Massachusetts: Treadwell Library Consumer Health Reference Center (Massachusetts General Hospital), http://www.mgh.harvard.edu/library/chrcindex.html
- Massachusetts: UMass HealthNet (University of Massachusetts Medical School, Worchester), http://healthnet.umassmed.edu/
- **Michigan:** Botsford General Hospital Library Consumer Health (Botsford General Hospital, Library & Internet Services), http://www.botsfordlibrary.org/consumer.htm
- **Michigan:** Helen DeRoy Medical Library (Providence Hospital and Medical Centers), http://www.providence-hospital.org/library/
- **Michigan:** Marquette General Hospital Consumer Health Library (Marquette General Hospital, Health Information Center), **http://www.mgh.org/center.html**
- Michigan: Patient Education Resouce Center University of Michigan Cancer Center (University of Michigan Comprehensive Cancer Center, Ann Arbor), http://www.cancer.med.umich.edu/learn/leares.htm
- Michigan: Sladen Library & Center for Health Information Resources Consumer Health Information (Detroit), http://www.henryford.com/body.cfm?id=39330
- Montana: Center for Health Information (St. Patrick Hospital and Health Sciences Center, Missoula)
- National: Consumer Health Library Directory (Medical Library Association, Consumer and Patient Health Information Section), http://caphis.mlanet.org/directory/index.html
- National: National Network of Libraries of Medicine (National Library of Medicine) provides library services for health professionals in the United States who do not have
  access to a medical library, http://nnlm.gov/
- National: NN/LM List of Libraries Serving the Public (National Network of Libraries of Medicine), http://nnlm.gov/members/

- Nevada: Health Science Library, West Charleston Library (Las Vegas-Clark County Library District, Las Vegas), http://www.lvccld.org/special\_collections/medical/index.htm
- New Hampshire: Dartmouth Biomedical Libraries (Dartmouth College Library, Hanover), http://www.dartmouth.edu/~biomed/resources.htmld/conshealth.htmld/
- New Jersey: Consumer Health Library (Rahway Hospital, Rahway), http://www.rahwayhospital.com/library.htm
- New Jersey: Dr. Walter Phillips Health Sciences Library (Englewood Hospital and Medical Center, Englewood), http://www.englewoodhospital.com/links/index.htm
- New Jersey: Meland Foundation (Englewood Hospital and Medical Center, Englewood), http://www.geocities.com/ResearchTriangle/9360/
- New York: Choices in Health Information (New York Public Library) NLM Consumer Pilot Project participant, http://www.nypl.org/branch/health/links.html
- New York: Health Information Center (Upstate Medical University, State University of New York, Syracuse), http://www.upstate.edu/library/hic/
- New York: Health Sciences Library (Long Island Jewish Medical Center, New Hyde Park), http://www.lij.edu/library/library.html
- New York: ViaHealth Medical Library (Rochester General Hospital), http://www.nyam.org/library/
- Ohio: Consumer Health Library (Akron General Medical Center, Medical & Consumer Health Library), http://www.akrongeneral.org/hwlibrary.htm
- Oklahoma: The Health Information Center at Saint Francis Hospital (Saint Francis Health System, Tulsa), http://www.sfh-tulsa.com/services/healthinfo.asp
- Oregon: Planetree Health Resource Center (Mid-Columbia Medical Center, The Dalles), http://www.mcmc.net/phrc/
- Pennsylvania: Community Health Information Library (Milton S. Hershey Medical Center, Hershey), http://www.hmc.psu.edu/commhealth/
- Pennsylvania: Community Health Resource Library (Geisinger Medical Center, Danville), http://www.geisinger.edu/education/commlib.shtml
- Pennsylvania: HealthInfo Library (Moses Taylor Hospital, Scranton), http://www.mth.org/healthwellness.html
- Pennsylvania: Hopwood Library (University of Pittsburgh, Health Sciences Library System, Pittsburgh), http://www.hsls.pitt.edu/guides/chi/hopwood/index\_html
- Pennsylvania: Koop Community Health Information Center (College of Physicians of Philadelphia), http://www.collphyphil.org/kooppg1.shtml
- Pennsylvania: Learning Resources Center Medical Library (Susquehanna Health System, Williamsport), http://www.shscares.org/services/lrc/index.asp
- Pennsylvania: Medical Library (UPMC Health System, Pittsburgh), http://www.upmc.edu/passavant/library.htm
- Quebec, Canada: Medical Library (Montreal General Hospital), http://www.mghlib.mcgill.ca/

- **South Dakota:** Rapid City Regional Hospital Medical Library (Rapid City Regional Hospital), http://www.rcrh.org/Services/Library/Default.asp
- **Texas:** Houston HealthWays (Houston Academy of Medicine-Texas Medical Center Library), http://hhw.library.tmc.edu/
- **Washington:** Community Health Library (Kittitas Valley Community Hospital), http://www.kvch.com/
- Washington: Southwest Washington Medical Center Library (Southwest Washington Medical Center, Vancouver), http://www.swmedicalcenter.com/body.cfm?id=72

## **ONLINE GLOSSARIES**

The Internet provides access to a number of free-to-use medical dictionaries. The National Library of Medicine has compiled the following list of online dictionaries:

- ADAM Medical Encyclopedia (A.D.A.M., Inc.), comprehensive medical reference: http://www.nlm.nih.gov/medlineplus/encyclopedia.html
- MedicineNet.com Medical Dictionary (MedicineNet, Inc.): http://www.medterms.com/Script/Main/hp.asp
- Merriam-Webster Medical Dictionary (Inteli-Health, Inc.): http://www.intelihealth.com/IH/
- Multilingual Glossary of Technical and Popular Medical Terms in Eight European Languages (European Commission) - Danish, Dutch, English, French, German, Italian, Portuguese, and Spanish: http://allserv.rug.ac.be/~rvdstich/eugloss/welcome.html
- On-line Medical Dictionary (CancerWEB): http://cancerweb.ncl.ac.uk/omd/
- Rare Diseases Terms (Office of Rare Diseases):
   http://ord.aspensys.com/asp/diseases/diseases.asp
- Technology Glossary (National Library of Medicine) Health Care Technology: http://www.nlm.nih.gov/nichsr/ta101/ta10108.htm

Beyond these, MEDLINEplus contains a very patient-friendly encyclopedia covering every aspect of medicine (licensed from A.D.A.M., Inc.). The ADAM Medical Encyclopedia can be accessed at <a href="http://www.nlm.nih.gov/medlineplus/encyclopedia.html">http://www.nlm.nih.gov/medlineplus/encyclopedia.html</a>. ADAM is also available on commercial Web sites such as drkoop.com (http://www.drkoop.com/) and Web MD (http://my.webmd.com/adam/asset/adam\_disease\_articles/a\_to\_z/a). The NIH suggests the following Web sites in the ADAM Medical Encyclopedia when searching for information on seborrheic dermatitis:

• Basic Guidelines for Seborrheic Dermatitis

## Cradle cap

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/000963.htm

#### Seborrheic dermatitis

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/000963.htm

• Signs & Symptoms for Seborrheic Dermatitis

## **Fatigue**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003088.htm

#### Hair loss

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003246.htm

#### Itch

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003217.htm

#### **Itching**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003217.htm

#### Obesity

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003101.htm

#### **Scales**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003226.htm

#### Skin lesion

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003220.htm

#### **Skin lesions**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003220.htm

#### **Stress**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003211.htm

#### • Background Topics for Seborrheic Dermatitis

#### **Bleeding**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/000045.htm

#### Chronic

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002312.htm

#### Head injury

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/000028.htm

#### Incidence

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002387.htm

#### Oily skin

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002043.htm

#### **Scales**

Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003226.htm

## **Online Dictionary Directories**

The following are additional online directories compiled by the National Library of Medicine, including a number of specialized medical dictionaries:

- Medical Dictionaries: Medical & Biological (World Health Organization): http://www.who.int/hlt/virtuallibrary/English/diction.htm#Medical
- MEL-Michigan Electronic Library List of Online Health and Medical Dictionaries (Michigan Electronic Library): http://mel.lib.mi.us/health/health-dictionaries.html
- Patient Education: Glossaries (DMOZ Open Directory Project):
   http://dmoz.org/Health/Education/Patient\_Education/Glossaries/

Web of Online Dictionaries (Bucknell University): http://www.yourdictionary.com/diction5.html#medicine

## SEBORRHEIC DERMATITIS DICTIONARY

The definitions below are derived from official public sources, including the National Institutes of Health [NIH] and the European Union [EU].

**Abdomen:** That portion of the body that lies between the thorax and the pelvis. [NIH]

**Abdominal:** Having to do with the abdomen, which is the part of the body between the chest and the hips that contains the pancreas, stomach, intestines, liver, gallbladder, and other organs. [NIH]

**Aberrant:** Wandering or deviating from the usual or normal course. [EU]

**Acceptor:** A substance which, while normally not oxidized by oxygen or reduced by hydrogen, can be oxidized or reduced in presence of a substance which is itself undergoing oxidation or reduction. [NIH]

**Acetylcholine:** A neurotransmitter. Acetylcholine in vertebrates is the major transmitter at neuromuscular junctions, autonomic ganglia, parasympathetic effector junctions, a subset of sympathetic effector junctions, and at many sites in the central nervous system. It is generally not used as an administered drug because it is broken down very rapidly by cholinesterases, but it is useful in some ophthalmological applications. [NIH]

Acne: A disorder of the skin marked by inflammation of oil glands and hair glands. [NIH]

**Acne Rosacea:** An acneiform eruption occurring mostly in middle-aged adults and appearing generally on the forehead, cheeks, nose, and chin. Three types are recognized: granulomatous, glandular hyperplastic with rhinophyma, and ocular. [NIH]

**Acne Vulgaris:** A chronic disorder of the pilosebaceous apparatus associated with an increase in sebum secretion. It is characterized by open comedones (blackheads), closed comedones (whiteheads), and pustular nodules. The cause is unknown, but heredity and age are predisposing factors. [NIH]

**Acquired Immunodeficiency Syndrome:** An acquired defect of cellular immunity associated with infection by the human immunodeficiency virus (HIV), a CD4-positive T-lymphocyte count under 200 cells/microliter or less than 14% of total lymphocytes, and increased susceptibility to opportunistic infections and malignant neoplasms. Clinical manifestations also include emaciation (wasting) and dementia. These elements reflect criteria for AIDS as defined by the CDC in 1993. [NIH]

**Acrodermatitis:** Inflammation involving the skin of the extremities, especially the hands and feet. Several forms are known, some idiopathic and some hereditary. The infantile form is called Gianotti-Crosti syndrome. [NIH]

**Adjuvant:** A substance which aids another, such as an auxiliary remedy; in immunology, nonspecific stimulator (e.g., BCG vaccine) of the immune response. [EU]

**Adrenal Cortex:** The outer layer of the adrenal gland. It secretes mineralocorticoids, androgens, and glucocorticoids. [NIH]

Adverse Effect: An unwanted side effect of treatment. [NIH]

Affinity: 1. Inherent likeness or relationship. 2. A special attraction for a specific element, organ, or structure. 3. Chemical affinity; the force that binds atoms in molecules; the tendency of substances to combine by chemical reaction. 4. The strength of noncovalent chemical binding between two substances as measured by the dissociation constant of the complex. 5. In immunology, a thermodynamic expression of the strength of interaction

between a single antigen-binding site and a single antigenic determinant (and thus of the stereochemical compatibility between them), most accurately applied to interactions among simple, uniform antigenic determinants such as haptens. Expressed as the association constant (K litres mole -1), which, owing to the heterogeneity of affinities in a population of antibody molecules of a given specificity, actually represents an average value (mean intrinsic association constant). 6. The reciprocal of the dissociation constant. [EU]

**Age Groups:** Persons classified by age from birth (infant, newborn) to octogenarians and older (aged, 80 and over). [NIH]

Aged, 80 and Over: A person 80 years of age and older. [NIH]

Agonists: Drugs that trigger an action from a cell or another drug. [NIH]

**Albumin:** 1. Any protein that is soluble in water and moderately concentrated salt solutions and is coagulable by heat. 2. Serum albumin; the major plasma protein (approximately 60 per cent of the total), which is responsible for much of the plasma colloidal osmotic pressure and serves as a transport protein carrying large organic anions, such as fatty acids, bilirubin, and many drugs, and also carrying certain hormones, such as cortisol and thyroxine, when their specific binding globulins are saturated. Albumin is synthesized in the liver. Low serum levels occur in protein malnutrition, active inflammation and serious hepatic and renal disease. [EU]

**Algorithms:** A procedure consisting of a sequence of algebraic formulas and/or logical steps to calculate or determine a given task. [NIH]

**Alkaline:** Having the reactions of an alkali. [EU]

**Allylamine:** Possesses an unusual and selective cytotoxicity for vascular smooth muscle cells in dogs and rats. Useful for experiments dealing with arterial injury, myocardial fibrosis or cardiac decompensation. [NIH]

**Alopecia:** Absence of hair from areas where it is normally present. [NIH]

**Alpha Particles:** Positively charged particles composed of two protons and two neutrons, i.e., helium nuclei, emitted during disintegration of very heavy isotopes; a beam of alpha particles or an alpha ray has very strong ionizing power, but weak penetrability. [NIH]

**Alternative medicine:** Practices not generally recognized by the medical community as standard or conventional medical approaches and used instead of standard treatments. Alternative medicine includes the taking of dietary supplements, megadose vitamins, and herbal preparations; the drinking of special teas; and practices such as massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

**Aluminum:** A metallic element that has the atomic number 13, atomic symbol Al, and atomic weight 26.98. [NIH]

**Amebiasis:** Infection with any of various amebae. It is an asymptomatic carrier state in most individuals, but diseases ranging from chronic, mild diarrhea to fulminant dysentery may occur. [NIH]

**Ameliorating:** A changeable condition which prevents the consequence of a failure or accident from becoming as bad as it otherwise would. [NIH]

**Amine:** An organic compound containing nitrogen; any member of a group of chemical compounds formed from ammonia by replacement of one or more of the hydrogen atoms by organic (hydrocarbon) radicals. The amines are distinguished as primary, secondary, and tertiary, according to whether one, two, or three hydrogen atoms are replaced. The amines include allylamine, amylamine, ethylamine, methylamine, phenylamine, propylamine, and many other compounds. [EU]

Amino acid: Any organic compound containing an amino (-NH2 and a carboxyl (- COOH)

group. The 20 a-amino acids listed in the accompanying table are the amino acids from which proteins are synthesized by formation of peptide bonds during ribosomal translation of messenger RNA; all except glycine, which is not optically active, have the L configuration. Other amino acids occurring in proteins, such as hydroxyproline in collagen, are formed by posttranslational enzymatic modification of amino acids residues in polypeptide chains. There are also several important amino acids, such as the neurotransmitter y-aminobutyric acid, that have no relation to proteins. Abbreviated AA. [EU]

**Amino Acid Sequence:** The order of amino acids as they occur in a polypeptide chain. This is referred to as the primary structure of proteins. It is of fundamental importance in determining protein conformation. [NIH]

**Ammonia:** A colorless alkaline gas. It is formed in the body during decomposition of organic materials during a large number of metabolically important reactions. [NIH]

**Anabolic:** Relating to, characterized by, or promoting anabolism. [EU]

Anal: Having to do with the anus, which is the posterior opening of the large bowel. [NIH]

Analgesic: An agent that alleviates pain without causing loss of consciousness. [EU]

Analog: In chemistry, a substance that is similar, but not identical, to another. [NIH]

Anatomical: Pertaining to anatomy, or to the structure of the organism. [EU]

Androgenic: Producing masculine characteristics. [EU]

**Androgens:** A class of sex hormones associated with the development and maintenance of the secondary male sex characteristics, sperm induction, and sexual differentiation. In addition to increasing virility and libido, they also increase nitrogen and water retention and stimulate skeletal growth. [NIH]

**Anemia:** A reduction in the number of circulating erythrocytes or in the quantity of hemoglobin. [NIH]

**Anhydrous:** Deprived or destitute of water. [EU]

**Anionic:** Pertaining to or containing an anion. [EU]

**Anions:** Negatively charged atoms, radicals or groups of atoms which travel to the anode or positive pole during electrolysis. [NIH]

**Anode:** Electrode held at a positive potential with respect to a cathode. [NIH]

**Antagonism:** Interference with, or inhibition of, the growth of a living organism by another living organism, due either to creation of unfavorable conditions (e. g. exhaustion of food supplies) or to production of a specific antibiotic substance (e. g. penicillin). [NIH]

**Antiandrogens:** Drugs used to block the production or interfere with the action of male sex hormones. [NIH]

**Antibacterial:** A substance that destroys bacteria or suppresses their growth or reproduction. [EU]

**Antibiotic:** A drug used to treat infections caused by bacteria and other microorganisms. [NIH]

**Antibodies:** Immunoglobulin molecules having a specific amino acid sequence by virtue of which they interact only with the antigen that induced their synthesis in cells of the lymphoid series (especially plasma cells), or with an antigen closely related to it. [NIH]

**Antibody:** A type of protein made by certain white blood cells in response to a foreign substance (antigen). Each antibody can bind to only a specific antigen. The purpose of this binding is to help destroy the antigen. Antibodies can work in several ways, depending on the nature of the antigen. Some antibodies destroy antigens directly. Others make it easier

for white blood cells to destroy the antigen. [NIH]

**Anticoagulants:** Agents that prevent blood clotting. Naturally occurring agents in the blood are included only when they are used as drugs. [NIH]

**Antifungal:** Destructive to fungi, or suppressing their reproduction or growth; effective against fungal infections. [EU]

**Antifungal Agents:** Substances that destroy fungi by suppressing their ability to grow or reproduce. They differ from fungicides, industrial because they defend against fungi present in human or animal tissues. [NIH]

**Antigen:** Any substance which is capable, under appropriate conditions, of inducing a specific immune response and of reacting with the products of that response, that is, with specific antibody or specifically sensitized T-lymphocytes, or both. Antigens may be soluble substances, such as toxins and foreign proteins, or particulate, such as bacteria and tissue cells; however, only the portion of the protein or polysaccharide molecule known as the antigenic determinant (q.v.) combines with antibody or a specific receptor on a lymphocyte. Abbreviated Ag. [EU]

Anti-infective: An agent that so acts. [EU]

**Anti-inflammatory:** Having to do with reducing inflammation. [NIH]

**Antimetabolite:** A chemical that is very similar to one required in a normal biochemical reaction in cells. Antimetabolites can stop or slow down the reaction. [NIH]

Antimicrobial: Killing microorganisms, or suppressing their multiplication or growth. [EU]

**Antineoplastic:** Inhibiting or preventing the development of neoplasms, checking the maturation and proliferation of malignant cells. [EU]

**Antiproliferative:** Counteracting a process of proliferation. [EU]

**Antipruritic:** Relieving or preventing itching. [EU]

**Antipsychotic:** Effective in the treatment of psychosis. Antipsychotic drugs (called also neuroleptic drugs and major tranquilizers) are a chemically diverse (including phenothiazines, thioxanthenes, butyrophenones, dibenzoxazepines, dibenzodiazepines, and diphenylbutylpiperidines) but pharmacologically similar class of drugs used to treat schizophrenic, paranoid, schizoaffective, and other psychotic disorders; acute delirium and dementia, and manic episodes (during induction of lithium therapy); to control the movement disorders associated with Huntington's chorea, Gilles de la Tourette's syndrome, and ballismus; and to treat intractable hiccups and severe nausea and vomiting. Antipsychotic agents bind to dopamine, histamine, muscarinic cholinergic, a-adrenergic, and serotonin receptors. Blockade of dopaminergic transmission in various areas is thought to be responsible for their major effects: antipsychotic action by blockade in the mesolimbic and mesocortical areas; extrapyramidal side effects (dystonia, akathisia, parkinsonism, and tardive dyskinesia) by blockade in the basal ganglia; and antiemetic effects by blockade in the chemoreceptor trigger zone of the medulla. Sedation and autonomic side effects (orthostatic hypotension, blurred vision, dry mouth, nasal congestion and constipation) are caused by blockade of histamine, cholinergic, and adrenergic receptors. [EU]

**Antiviral:** Destroying viruses or suppressing their replication. [EU]

**Apathy:** Lack of feeling or emotion; indifference. [EU]

**Apocrine Glands:** Large, branched, specialized sweat glands that empty into the upper portion of a hair follicle instead of directly onto the skin. [NIH]

**Aqueous:** Having to do with water. [NIH]

**Archaea:** One of the three domains of life (the others being bacteria and Eucarya), formerly

called Archaebacteria under the taxon Bacteria, but now considered separate and distinct. They are characterized by: 1) the presence of characteristic tRNAs and ribosomal RNAs; 2) the absence of peptidoglycan cell walls; 3) the presence of ether-linked lipids built from branched-chain subunits; and 4) their occurrence in unusual habitats. While archaea resemble bacteria in morphology and genomic organization, they resemble eukarya in their method of genomic replication. The domain contains at least three kingdoms: crenarchaeota, euryarchaeota, and korarchaeota. [NIH]

Arcuate Nucleus: A nucleus located in the middle hypothalamus in the most ventral part of the third ventricle near the entrance of the infundibular recess. Its small cells are in close contact with the ependyma. [NIH]

**Arterial:** Pertaining to an artery or to the arteries. [EU]

**Arteries:** The vessels carrying blood away from the heart. [NIH]

**Atmospheric Pressure:** The pressure at any point in an atmosphere due solely to the weight of the atmospheric gases above the point concerned. [NIH]

**Atopic:** Pertaining to an atopen or to atopy; allergic. [EU]

**Atopic Eczema:** Generic term for acute or chronic inflammatory conditions of the skin, typically erythematous, edematous, papular, vesicular, and crusting; often accompanied by sensations of itching and burning. [NIH]

Autonomic: Self-controlling; functionally independent. [EU]

Bacteria: Unicellular prokaryotic microorganisms which generally possess rigid cell walls, multiply by cell division, and exhibit three principal forms: round or coccal, rodlike or bacillary, and spiral or spirochetal. [NIH]

**Bacterial Infections:** Infections by bacteria, general or unspecified. [NIH]

Bactericidal: Substance lethal to bacteria; substance capable of killing bacteria. [NIH]

Base: In chemistry, the nonacid part of a salt; a substance that combines with acids to form salts; a substance that dissociates to give hydroxide ions in aqueous solutions; a substance whose molecule or ion can combine with a proton (hydrogen ion); a substance capable of donating a pair of electrons (to an acid) for the formation of a coordinate covalent bond. [EU]

Basophils: Granular leukocytes characterized by a relatively pale-staining, lobate nucleus and cytoplasm containing coarse dark-staining granules of variable size and stainable by basic dyes. [NIH]

**Benign:** Not cancerous; does not invade nearby tissue or spread to other parts of the body. [NIH]

Benign prostatic hyperplasia: A benign (noncancerous) condition in which an overgrowth of prostate tissue pushes against the urethra and the bladder, blocking the flow of urine. Also called benign prostatic hypertrophy or BPH. [NIH]

Benzoic Acid: A fungistatic compound that is widely used as a food preservative. It is conjugated to glycine in the liver and excreted as hippuric acid. [NIH]

Bile: An emulsifying agent produced in the liver and secreted into the duodenum. Its composition includes bile acids and salts, cholesterol, and electrolytes. It aids digestion of fats in the duodenum. [NIH]

Bilirubin: A bile pigment that is a degradation product of heme. [NIH]

Bioavailability: The degree to which a drug or other substance becomes available to the target tissue after administration. [EU]

Biochemical: Relating to biochemistry; characterized by, produced by, or involving chemical reactions in living organisms. [EU]

**Biotechnology:** Body of knowledge related to the use of organisms, cells or cell-derived constituents for the purpose of developing products which are technically, scientifically and clinically useful. Alteration of biologic function at the molecular level (i.e., genetic engineering) is a central focus; laboratory methods used include transfection and cloning technologies, sequence and structure analysis algorithms, computer databases, and gene and protein structure function analysis and prediction. [NIH]

**Biotin:** Hexahydro-2-oxo-1H-thieno(3,4-d)imidazole-4-pentanoic acid. Growth factor present in minute amounts in every living cell. It occurs mainly bound to proteins or polypeptides and is abundant in liver, kidney, pancreas, yeast, and milk. The biotin content of cancerous tissue is higher than that of normal tissue. [NIH]

Bladder: The organ that stores urine. [NIH]

**Blepharitis:** Inflammation of the eyelids. [NIH]

Blood Glucose: Glucose in blood. [NIH]

**Blood pressure:** The pressure of blood against the walls of a blood vessel or heart chamber. Unless there is reference to another location, such as the pulmonary artery or one of the heart chambers, it refers to the pressure in the systemic arteries, as measured, for example, in the forearm. [NIH]

**Blood vessel:** A tube in the body through which blood circulates. Blood vessels include a network of arteries, arterioles, capillaries, venules, and veins. [NIH]

**Body Fluids:** Liquid components of living organisms. [NIH]

**Bone Marrow:** The soft tissue filling the cavities of bones. Bone marrow exists in two types, yellow and red. Yellow marrow is found in the large cavities of large bones and consists mostly of fat cells and a few primitive blood cells. Red marrow is a hematopoietic tissue and is the site of production of erythrocytes and granular leukocytes. Bone marrow is made up of a framework of connective tissue containing branching fibers with the frame being filled with marrow cells. [NIH]

**Branch:** Most commonly used for branches of nerves, but applied also to other structures. [NIH]

**Buccal:** Pertaining to or directed toward the cheek. In dental anatomy, used to refer to the buccal surface of a tooth. [EU]

**Buffers:** A chemical system that functions to control the levels of specific ions in solution. When the level of hydrogen ion in solution is controlled the system is called a pH buffer. [NIH]

**Bullous:** Pertaining to or characterized by bullae. [EU]

**Burns:** Injuries to tissues caused by contact with heat, steam, chemicals (burns, chemical), electricity (burns, electric), or the like. [NIH]

**Burns, Electric:** Burns produced by contact with electric current or from a sudden discharge of electricity. [NIH]

**Cadmium:** An element with atomic symbol Cd, atomic number 48, and atomic weight 114. It is a metal and ingestion will lead to cadmium poisoning. [NIH]

**Cadmium Poisoning:** Poisoning occurring after exposure to cadmium compounds or fumes. It may cause gastrointestinal syndromes, anemia, or pneumonitis. [NIH]

**Calcium:** A basic element found in nearly all organized tissues. It is a member of the alkaline earth family of metals with the atomic symbol Ca, atomic number 20, and atomic weight 40. Calcium is the most abundant mineral in the body and combines with phosphorus to form calcium phosphate in the bones and teeth. It is essential for the normal functioning of nerves and muscles and plays a role in blood coagulation (as factor IV) and in

many enzymatic processes. [NIH]

Candidiasis: Infection with a fungus of the genus Candida. It is usually a superficial infection of the moist cutaneous areas of the body, and is generally caused by C. albicans; it most commonly involves the skin (dermatocandidiasis), oral mucous membranes (thrush, def. 1), respiratory tract (bronchocandidiasis), and vagina (vaginitis). Rarely there is a systemic infection or endocarditis. Called also moniliasis, candidosis, oidiomycosis, and formerly blastodendriosis. [EU]

**Carbohydrate:** An aldehyde or ketone derivative of a polyhydric alcohol, particularly of the pentahydric and hexahydric alcohols. They are so named because the hydrogen and oxygen are usually in the proportion to form water, (CH2O)n. The most important carbohydrates are the starches, sugars, celluloses, and gums. They are classified into mono-, di-, tri-, polyand heterosaccharides. [EU]

**Carcinogen:** Any substance that causes cancer. [NIH]

**Carcinogenic:** Producing carcinoma. [EU]

**Carcinoma:** Cancer that begins in the skin or in tissues that line or cover internal organs. [NIH]

**Cardiac:** Having to do with the heart. [NIH]

Catheters: A small, flexible tube that may be inserted into various parts of the body to inject or remove liquids. [NIH]

Cathode: An electrode, usually an incandescent filament of tungsten, which emits electrons in an X-ray tube. [NIH]

Cations: Postively charged atoms, radicals or groups of atoms which travel to the cathode or negative pole during electrolysis. [NIH]

Caudal: Denoting a position more toward the cauda, or tail, than some specified point of reference; same as inferior, in human anatomy. [EU]

**Caustic:** An escharotic or corrosive agent. Called also cauterant. [EU]

Cell: The individual unit that makes up all of the tissues of the body. All living things are made up of one or more cells. [NIH]

Cell Count: A count of the number of cells of a specific kind, usually measured per unit volume of sample. [NIH]

**Cell Division:** The fission of a cell. [NIH]

**Cell membrane:** Cell membrane = plasma membrane. The structure enveloping a cell, enclosing the cytoplasm, and forming a selective permeability barrier; it consists of lipids, proteins, and some carbohydrates, the lipids thought to form a bilayer in which integral proteins are embedded to varying degrees. [EU]

**Cell proliferation:** An increase in the number of cells as a result of cell growth and cell division. [NIH]

Cellulitis: An acute, diffuse, and suppurative inflammation of loose connective tissue, particularly the deep subcutaneous tissues, and sometimes muscle, which is most commonly seen as a result of infection of a wound, ulcer, or other skin lesions. [NIH]

Cellulose: A polysaccharide with glucose units linked as in cellobiose. It is the chief constituent of plant fibers, cotton being the purest natural form of the substance. As a raw material, it forms the basis for many derivatives used in chromatography, ion exchange materials, explosives manufacturing, and pharmaceutical preparations. [NIH]

**Central Nervous System:** The main information-processing organs of the nervous system, consisting of the brain, spinal cord, and meninges. [NIH]

**Cervix:** The lower, narrow end of the uterus that forms a canal between the uterus and vagina. [NIH]

Chemotactic Factors: Chemical substances that attract or repel cells or organisms. The concept denotes especially those factors released as a result of tissue injury, invasion, or immunologic activity, that attract leukocytes, macrophages, or other cells to the site of infection or insult. [NIH]

Chemotherapeutic agent: A drug used to treat cancer. [NIH]

Chemotherapy: Treatment with anticancer drugs. [NIH]

Chin: The anatomical frontal portion of the mandible, also known as the mentum, that contains the line of fusion of the two separate halves of the mandible (symphysis menti). This line of fusion divides inferiorly to enclose a triangular area called the mental protuberance. On each side, inferior to the second premolar tooth, is the mental foramen for the passage of blood vessels and a nerve. [NIH]

**Chlorophyll:** Porphyrin derivatives containing magnesium that act to convert light energy in photosynthetic organisms. [NIH]

**Cholesterol:** The principal sterol of all higher animals, distributed in body tissues, especially the brain and spinal cord, and in animal fats and oils. [NIH]

**Chromosome:** Part of a cell that contains genetic information. Except for sperm and eggs, all human cells contain 46 chromosomes. [NIH]

Chronic: A disease or condition that persists or progresses over a long period of time. [NIH]

**Cicatricial:** Ectropion due to scar tissue on the margins or the surrounding surfaces of the eyelids. [NIH]

**Cimetidine:** A histamine congener, it competitively inhibits histamine binding to H2 receptors. Cimetidine has a range of pharmacological actions. It inhibits gastric acid secretion, as well as pepsin and gastrin output. It also blocks the activity of cytochrome P-450. [NIH]

**Citric Acid:** A key intermediate in metabolism. It is an acid compound found in citrus fruits. The salts of citric acid (citrates) can be used as anticoagulants due to their calcium chelating ability. [NIH]

Citrus: Any tree or shrub of the Rue family or the fruit of these plants. [NIH]

**Clinical Medicine:** The study and practice of medicine by direct examination of the patient. [NIH]

**Clinical trial:** A research study that tests how well new medical treatments or other interventions work in people. Each study is designed to test new methods of screening, prevention, diagnosis, or treatment of a disease. [NIH]

**Cloning:** The production of a number of genetically identical individuals; in genetic engineering, a process for the efficient replication of a great number of identical DNA molecules. [NIH]

**Coal:** A natural fuel formed by partial decomposition of vegetable matter under certain environmental conditions. [NIH]

**Coal Tar:** A by-product of the destructive distillation of coal used as a topical antieczematic. It is an antipruritic and keratoplastic agent used also in the treatment of psoriasis and other skin conditions. Occupational exposure to soots, tars, and certain mineral oils is known to be carcinogenic according to the Fourth Annual Report on Carcinogens (NTP 85-002, 1985) (Merck Index, 11th ed). [NIH]

Cod Liver Oil: Oil obtained from fresh livers of the cod family, Gadidae. It is a source of

vitamins A and D. [NIH]

**Coenzymes:** Substances that are necessary for the action or enhancement of action of an enzyme. Many vitamins are coenzymes. [NIH]

**Cofactor:** A substance, microorganism or environmental factor that activates or enhances the action of another entity such as a disease-causing agent. [NIH]

**Cognition:** Intellectual or mental process whereby an organism becomes aware of or obtains knowledge. [NIH]

**Collagen:** A polypeptide substance comprising about one third of the total protein in mammalian organisms. It is the main constituent of skin, connective tissue, and the organic substance of bones and teeth. Different forms of collagen are produced in the body but all consist of three alpha-polypeptide chains arranged in a triple helix. Collagen is differentiated from other fibrous proteins, such as elastin, by the content of proline, hydroxyproline, and hydroxylysine; by the absence of tryptophan; and particularly by the high content of polar groups which are responsible for its swelling properties. [NIH]

**Collagen disease:** A term previously used to describe chronic diseases of the connective tissue (e.g., rheumatoid arthritis, systemic lupus erythematosus, and systemic sclerosis), but now is thought to be more appropriate for diseases associated with defects in collagen, which is a component of the connective tissue. [NIH]

Colloidal: Of the nature of a colloid. [EU]

**Combination Therapy:** Association of 3 drugs to treat AIDS (AZT + DDC or DDI + protease inhibitor). [NIH]

**Comedo:** A plug of keratin and sebum within the dilated orifice of a hair follicle, frequently containing the bacteria Propionibacterium acnes, Staphylococcus albus, and Pityrosporon ovale; called also blackhead. [EU]

**Complete remission:** The disappearance of all signs of cancer. Also called a complete response. [NIH]

**Computational Biology:** A field of biology concerned with the development of techniques for the collection and manipulation of biological data, and the use of such data to make biological discoveries or predictions. This field encompasses all computational methods and theories applicable to molecular biology and areas of computer-based techniques for solving biological problems including manipulation of models and datasets. [NIH]

**Conception:** The onset of pregnancy, marked by implantation of the blastocyst; the formation of a viable zygote. [EU]

**Congestion:** Excessive or abnormal accumulation of blood in a part. [EU]

**Conjugated:** Acting or operating as if joined; simultaneous. [EU]

**Connective Tissue:** Tissue that supports and binds other tissues. It consists of connective tissue cells embedded in a large amount of extracellular matrix. [NIH]

**Connective Tissue:** Tissue that supports and binds other tissues. It consists of connective tissue cells embedded in a large amount of extracellular matrix. [NIH]

**Connective Tissue Cells:** A group of cells that includes fibroblasts, cartilage cells, adipocytes, smooth muscle cells, and bone cells. [NIH]

Consciousness: Sense of awareness of self and of the environment. [NIH]

**Contact dermatitis:** Inflammation of the skin with varying degrees of erythema, edema and vesinculation resulting from cutaneous contact with a foreign substance or other exposure. [NIH]

Contamination: The soiling or pollution by inferior material, as by the introduction of

organisms into a wound, or sewage into a stream. [EU]

**Contraindications:** Any factor or sign that it is unwise to pursue a certain kind of action or treatment, e. g. giving a general anesthetic to a person with pneumonia. [NIH]

**Controlled study:** An experiment or clinical trial that includes a comparison (control) group. [NIH]

Cor: The muscular organ that maintains the circulation of the blood. c. adiposum a heart that has undergone fatty degeneration or that has an accumulation of fat around it; called also fat or fatty, heart. c. arteriosum the left side of the heart, so called because it contains oxygenated (arterial) blood. c. biloculare a congenital anomaly characterized by failure of formation of the atrial and ventricular septums, the heart having only two chambers, a single atrium and a single ventricle, and a common atrioventricular valve. c. bovinum (L. 'ox heart') a greatly enlarged heart due to a hypertrophied left ventricle; called also c. taurinum and bucardia. c. dextrum (L. 'right heart') the right atrium and ventricle. c. hirsutum, c. villosum. c. mobile (obs.) an abnormally movable heart. c. pendulum a heart so movable that it seems to be hanging by the great blood vessels. c. pseudotriloculare biatriatum a congenital cardiac anomaly in which the heart functions as a three-chambered heart because of tricuspid atresia, the right ventricle being extremely small or rudimentary and the right atrium greatly dilated. Blood passes from the right to the left atrium and thence disease due to pulmonary hypertension secondary to disease of the lung, or its blood vessels, with hypertrophy of the right ventricle. [EU]

Corneum: The superficial layer of the epidermis containing keratinized cells. [NIH]

**Coronary:** Encircling in the manner of a crown; a term applied to vessels; nerves, ligaments, etc. The term usually denotes the arteries that supply the heart muscle and, by extension, a pathologic involvement of them. [EU]

**Coronary Thrombosis:** Presence of a thrombus in a coronary artery, often causing a myocardial infarction. [NIH]

Corticosteroid: Any of the steroids elaborated by the adrenal cortex (excluding the sex hormones of adrenal origin) in response to the release of corticotrophin (adrenocorticotropic hormone) by the pituitary gland, to any of the synthetic equivalents of these steroids, or to angiotensin II. They are divided, according to their predominant biological activity, into three major groups: glucocorticoids, chiefly influencing carbohydrate, fat, and protein metabolism; mineralocorticoids, affecting the regulation of electrolyte and water balance; and C19 androgens. Some corticosteroids exhibit both types of activity in varying degrees, and others exert only one type of effect. The corticosteroids are used clinically for hormonal replacement therapy, for suppression of ACTH secretion by the anterior pituitary, as antineoplastic, antiallergic, and anti-inflammatory agents, and to suppress the immune response. Called also adrenocortical hormone and corticoid. [EU]

**Cortisol:** A steroid hormone secreted by the adrenal cortex as part of the body's response to stress. [NIH]

**Curative:** Tending to overcome disease and promote recovery. [EU]

**Cutaneous:** Having to do with the skin. [NIH]

**Cyanide:** An extremely toxic class of compounds that can be lethal on inhaling of ingesting in minute quantities. [NIH]

**Cyproterone:** An anti-androgen that, in the form of its acetate, also has progestational properties. It is used in the treatment of hypersexuality in males, as a palliative in prostatic carcinoma, and, in combination with estrogen, for the therapy of severe acne and hirsutism in females. [NIH]

**Cyproterone Acetate:** An agent with anti-androgen and progestational properties. It shows

competitive binding with dihydrotestosterone at androgen receptor sites. [NIH]

**Cytochrome:** Any electron transfer hemoprotein having a mode of action in which the transfer of a single electron is effected by a reversible valence change of the central iron atom of the heme prosthetic group between the +2 and +3 oxidation states; classified as cytochromes a in which the heme contains a formyl side chain, cytochromes b, which contain protoheme or a closely similar heme that is not covalently bound to the protein, cytochromes c in which protoheme or other heme is covalently bound to the protein, and cytochromes d in which the iron-tetrapyrrole has fewer conjugated double bonds than the hemes have. Well-known cytochromes have been numbered consecutively within groups and are designated by subscripts (beginning with no subscript), e.g. cytochromes c, c1, C2, . New cytochromes are named according to the wavelength in nanometres of the absorption maximum of the a-band of the iron (II) form in pyridine, e.g., c-555. [EU]

**Cytokine:** Small but highly potent protein that modulates the activity of many cell types, including T and B cells. [NIH]

**Cytoplasm:** The protoplasm of a cell exclusive of that of the nucleus; it consists of a continuous aqueous solution (cytosol) and the organelles and inclusions suspended in it (phaneroplasm), and is the site of most of the chemical activities of the cell. [EU]

Cytostatic: An agent that suppresses cell growth and multiplication. [EU]

Cytotoxic: Cell-killing. [NIH]

**Dairy Products:** Raw and processed or manufactured milk and milk-derived products. These are usually from cows (bovine) but are also from goats, sheep, reindeer, and water buffalo. [NIH]

Deamination: The removal of an amino group (NH2) from a chemical compound. [NIH]

**Dementia:** An acquired organic mental disorder with loss of intellectual abilities of sufficient severity to interfere with social or occupational functioning. The dysfunction is multifaceted and involves memory, behavior, personality, judgment, attention, spatial relations, language, abstract thought, and other executive functions. The intellectual decline is usually progressive, and initially spares the level of consciousness. [NIH]

Density: The logarithm to the base 10 of the opacity of an exposed and processed film. [NIH]

**Depressive Disorder:** An affective disorder manifested by either a dysphoric mood or loss of interest or pleasure in usual activities. The mood disturbance is prominent and relatively persistent. [NIH]

**Dermatitis:** Any inflammation of the skin. [NIH]

**Dermatitis, Contact:** A type of acute or chronic skin reaction in which sensitivity is manifested by reactivity to materials or substances coming in contact with the skin. It may involve allergic or non-allergic mechanisms. [NIH]

**Dermatitis, Seborrheic:** A chronic inflammatory disease of the skin of unknown etiology. It is characterized by moderate erythema, dry, moist, or greasy scaling, and yellow crusted patches on various areas, especially the scalp. On the scalp, it generally appears first as small patches of scales, progressing to involve the entire scalp with exfoliation of excessive amounts of dry scales (dandruff). [NIH]

**Dermatologic Agents:** Drugs used to treat or prevent skin disorders or for the routine care of skin. [NIH]

**Dermatology:** A medical specialty concerned with the skin, its structure, functions, diseases, and treatment. [NIH]

**Dermatosis:** Any skin disease, especially one not characterized by inflammation. [EU]

**Dermis:** A layer of vascular connective tissue underneath the epidermis. The surface of the dermis contains sensitive papillae. Embedded in or beneath the dermis are sweat glands, hair follicles, and sebaceous glands. [NIH]

**Desonide:** A nonfluorinated corticosteroid anti-inflammatory agent used topically for dermatoses. [NIH]

**Desquamation:** The shedding of epithelial elements, chiefly of the skin, in scales or small sheets; exfoliation. [EU]

**Detergents:** Purifying or cleansing agents, usually salts of long-chain aliphatic bases or acids, that exert cleansing (oil-dissolving) and antimicrobial effects through a surface action that depends on possessing both hydrophilic and hydrophobic properties. [NIH]

**Deuterium:** Deuterium. The stable isotope of hydrogen. It has one neutron and one proton in the nucleus. [NIH]

**Diabetes Mellitus:** A heterogeneous group of disorders that share glucose intolerance in common. [NIH]

**Diabetic Retinopathy:** Retinopathy associated with diabetes mellitus, which may be of the background type, progressively characterized by microaneurysms, interretinal punctuate macular edema, or of the proliferative type, characterized by neovascularization of the retina and optic disk, which may project into the vitreous, proliferation of fibrous tissue, vitreous hemorrhage, and retinal detachment. [NIH]

**Diagnostic procedure:** A method used to identify a disease. [NIH]

**Diaper Rash:** A type of irritant dermatitis localized to the area in contact with a diaper and occurring most often as a reaction to prolonged contact with urine, feces, or retained soap or detergent. [NIH]

**Diencephalon:** The paired caudal parts of the prosencephalon from which the thalamus, hypothalamus, epithalamus, and subthalamus are derived. [NIH]

**Dihydrotestosterone:** Anabolic agent. [NIH]

**Dihydroxy:** AMPA/Kainate antagonist. [NIH]

**Direct:** 1. Straight; in a straight line. 2. Performed immediately and without the intervention of subsidiary means. [EU]

**Disinfectant:** An agent that disinfects; applied particularly to agents used on inanimate objects. [EU]

**Distal:** Remote; farther from any point of reference; opposed to proximal. In dentistry, used to designate a position on the dental arch farther from the median line of the jaw. [EU]

**Domesticated:** Species in which the evolutionary process has been influenced by humans to meet their needs. [NIH]

**Dopa:** The racemic or DL form of DOPA, an amino acid found in various legumes. The dextro form has little physiologic activity but the levo form (levodopa) is a very important physiologic mediator and precursor and pharmacological agent. [NIH]

**Dopamine:** An endogenous catecholamine and prominent neurotransmitter in several systems of the brain. In the synthesis of catecholamines from tyrosine, it is the immediate precursor to norepinephrine and epinephrine. Dopamine is a major transmitter in the extrapyramidal system of the brain, and important in regulating movement. A family of dopaminergic receptor subtypes mediate its action. Dopamine is used pharmacologically for its direct (beta adrenergic agonist) and indirect (adrenergic releasing) sympathomimetic effects including its actions as an inotropic agent and as a renal vasodilator. [NIH]

Double-blind: Pertaining to a clinical trial or other experiment in which neither the subject

nor the person administering treatment knows which treatment any particular subject is receiving. [EU]

**Drug Interactions:** The action of a drug that may affect the activity, metabolism, or toxicity of another drug. [NIH]

**Duct:** A tube through which body fluids pass. [NIH]

**Dysplasia:** Cells that look abnormal under a microscope but are not cancer. [NIH]

Eczema: A pruritic papulovesicular dermatitis occurring as a reaction to many endogenous and exogenous agents (Dorland, 27th ed). [NIH]

Edema: Excessive amount of watery fluid accumulated in the intercellular spaces, most commonly present in subcutaneous tissue. [NIH]

Efficacy: The extent to which a specific intervention, procedure, regimen, or service produces a beneficial result under ideal conditions. Ideally, the determination of efficacy is based on the results of a randomized control trial. [NIH]

Elastic: Susceptible of resisting and recovering from stretching, compression or distortion applied by a force. [EU]

**Elastin:** The protein that gives flexibility to tissues. [NIH]

**Electrolysis:** Destruction by passage of a galvanic electric current, as in disintegration of a chemical compound in solution. [NIH]

Electrolyte: A substance that dissociates into ions when fused or in solution, and thus becomes capable of conducting electricity; an ionic solute. [EU]

**Emaciation:** Clinical manifestation of excessive learness usually caused by disease or a lack of nutrition. [NIH]

**Emollient:** Softening or soothing; called also malactic. [EU]

**Emulsion:** A preparation of one liquid distributed in small globules throughout the body of a second liquid. The dispersed liquid is the discontinuous phase, and the dispersion medium is the continuous phase. When oil is the dispersed liquid and an aqueous solution is the continuous phase, it is known as an oil-in-water emulsion, whereas when water or aqueous solution is the dispersed phase and oil or oleaginous substance is the continuous phase, it is known as a water-in-oil emulsion. Pharmaceutical emulsions for which official standards have been promulgated include cod liver oil emulsion, cod liver oil emulsion with malt, liquid petrolatum emulsion, and phenolphthalein in liquid petrolatum emulsion. [EU]

**Endocrine Glands:** Ductless glands that secrete substances which are released directly into the circulation and which influence metabolism and other body functions. [NIH]

Endogenous: Produced inside an organism or cell. The opposite is external (exogenous) production. [NIH]

**Endorphins:** One of the three major groups of endogenous opioid peptides. They are large peptides derived from the pro-opiomelanocortin precursor. The known members of this group are alpha-, beta-, and gamma-endorphin. The term endorphin is also sometimes used to refer to all opioid peptides, but the narrower sense is used here; opioid peptides is used for the broader group. [NIH]

**Enhancer:** Transcriptional element in the virus genome. [NIH]

**Enkephalin:** A natural opiate painkiller, in the hypothalamus. [NIH]

Environmental Health: The science of controlling or modifying those conditions, influences, or forces surrounding man which relate to promoting, establishing, and maintaining health. [NIH]

**Enzymatic:** Phase where enzyme cuts the precursor protein. [NIH]

**Enzyme:** A protein that speeds up chemical reactions in the body. [NIH]

**Eosinophils:** Granular leukocytes with a nucleus that usually has two lobes connected by a slender thread of chromatin, and cytoplasm containing coarse, round granules that are uniform in size and stainable by eosin. [NIH]

**Ependyma:** A thin membrane that lines the ventricles of the brain and the central canal of the spinal cord. [NIH]

**Epidemic:** Occurring suddenly in numbers clearly in excess of normal expectancy; said especially of infectious diseases but applied also to any disease, injury, or other health-related event occurring in such outbreaks. [EU]

**Epidemiological:** Relating to, or involving epidemiology. [EU]

Epidermal: Pertaining to or resembling epidermis. Called also epidermic or epidermoid. [EU]

**Epidermis:** Nonvascular layer of the skin. It is made up, from within outward, of five layers: 1) basal layer (stratum basale epidermidis); 2) spinous layer (stratum spinosum epidermidis); 3) granular layer (stratum granulosum epidermidis); 4) clear layer (stratum lucidum epidermidis); and 5) horny layer (stratum corneum epidermidis). [NIH]

**Epinephrine:** The active sympathomimetic hormone from the adrenal medulla in most species. It stimulates both the alpha- and beta- adrenergic systems, causes systemic vasoconstriction and gastrointestinal relaxation, stimulates the heart, and dilates bronchi and cerebral vessels. It is used in asthma and cardiac failure and to delay absorption of local anesthetics. [NIH]

Epithelial: Refers to the cells that line the internal and external surfaces of the body. [NIH]

**Epithelium:** One or more layers of epithelial cells, supported by the basal lamina, which covers the inner or outer surfaces of the body. [NIH]

**Erectile:** The inability to get or maintain an erection for satisfactory sexual intercourse. Also called impotence. [NIH]

**Erection:** The condition of being made rigid and elevated; as erectile tissue when filled with blood. [EU]

**Erythema:** Redness of the skin produced by congestion of the capillaries. This condition may result from a variety of causes. [NIH]

**Erythrocytes:** Red blood cells. Mature erythrocytes are non-nucleated, biconcave disks containing hemoglobin whose function is to transport oxygen. [NIH]

**Estrogen:** One of the two female sex hormones. [NIH]

**Ethanol:** A clear, colorless liquid rapidly absorbed from the gastrointestinal tract and distributed throughout the body. It has bactericidal activity and is used often as a topical disinfectant. It is widely used as a solvent and preservative in pharmaceutical preparations as well as serving as the primary ingredient in alcoholic beverages. [NIH]

**Ether:** One of a class of organic compounds in which any two organic radicals are attached directly to a single oxygen atom. [NIH]

**Ethylene Glycol:** A colorless, odorless, viscous dihydroxy alcohol. It has a sweet taste, but is poisonous if ingested. Ethylene glycol is the most important glycol commercially available and is manufactured on a large scale in the United States. It is used as an antifreeze and coolant, in hydraulic fluids, and in the manufacture of low-freezing dynamites and resins.

**Etretinate:** An oral retinoid used in the treatment of keratotic genodermatosis, lichen planus, and psoriasis. Beneficial effects have also been claimed in the prophylaxis of epithelial

neoplasia. The compound may be teratogenic. [NIH]

**Evoke:** The electric response recorded from the cerebral cortex after stimulation of a peripheral sense organ. [NIH]

**Excipient:** Any more or less inert substance added to a prescription in order to confer a suitable consistency or form to the drug; a vehicle. [EU]

**Excitation:** An act of irritation or stimulation or of responding to a stimulus; the addition of energy, as the excitation of a molecule by absorption of photons. [EU]

**Exfoliation:** A falling off in scales or layers. [EU]

**Exhaustion:** The feeling of weariness of mind and body. [NIH]

Exogenous: Developed or originating outside the organism, as exogenous disease. [EU]

**Expectorant:** 1. Promoting the ejection, by spitting, of mucus or other fluids from the lungs and trachea. 2. An agent that promotes the ejection of mucus or exudate from the lungs, bronchi, and trachea; sometimes extended to all remedies that quiet cough (antitussives). [EU]

**Extensor:** A muscle whose contraction tends to straighten a limb; the antagonist of a flexor. [NIH]

Extracellular: Outside a cell or cells. [EU]

**Extracellular Matrix:** A meshwork-like substance found within the extracellular space and in association with the basement membrane of the cell surface. It promotes cellular proliferation and provides a supporting structure to which cells or cell lysates in culture dishes adhere. [NIH]

**Exudate:** Material, such as fluid, cells, or cellular debris, which has escaped from blood vessels and has been deposited in tissues or on tissue surfaces, usually as a result of inflammation. An exudate, in contrast to a transudate, is characterized by a high content of protein, cells, or solid materials derived from cells. [EU]

**Facial:** Of or pertaining to the face. [EU]

**Family Planning:** Programs or services designed to assist the family in controlling reproduction by either improving or diminishing fertility. [NIH]

Fat: Total lipids including phospholipids. [NIH]

**Fatty acids:** A major component of fats that are used by the body for energy and tissue development. [NIH]

**Feces:** The excrement discharged from the intestines, consisting of bacteria, cells exfoliated from the intestines, secretions, chiefly of the liver, and a small amount of food residue. [EU]

**Fertilizers:** Substances or mixtures that are added to the soil to supply nutrients or to make available nutrients already present in the soil, in order to increase plant growth and productivity. [NIH]

**Fetus:** The developing offspring from 7 to 8 weeks after conception until birth. [NIH]

**Fibrosis:** Any pathological condition where fibrous connective tissue invades any organ, usually as a consequence of inflammation or other injury. [NIH]

**Filarioidea:** A superfamily of nematodes of the suborder Spirurina. Its organisms possess a filiform body and a mouth surrounded by papillae. [NIH]

**Finasteride:** An orally active testosterone 5-alpha-reductase inhibitor. It is used as a surgical alternative for treatment of benign prostatic hyperplasia. [NIH]

**Fistulas:** An abnormal passage from one hollow structure of the body to another, or from a hollow structure to the surface, formed by an abscess, disease process, incomplete closure of

a wound, or by a congenital anomaly. [NIH]

Fluconazole: Triazole antifungal agent that is used to treat oropharyngeal candidiasis and cryptococcal meningitis in AIDS. [NIH]

**Fluorouracil:** A pyrimidine analog that acts as an antineoplastic antimetabolite and also has immunosuppressant. It interferes with DNA synthesis by blocking the thymidylate synthetase conversion of deoxyuridylic acid to thymidylic acid. [NIH]

Follicles: Shafts through which hair grows. [NIH]

Folliculitis: Inflammation of follicles, primarily hair follicles. [NIH]

**Food Technology:** The application of knowledge to the food industry. [NIH]

**Fungemia:** The presence of fungi circulating in the blood. Opportunistic fungal sepsis is seen most often in immunosuppressed patients with severe neutropenia or in postoperative patients with intravenous catheters and usually follows prolonged antibiotic therapy. [NIH]

**Fungi:** A kingdom of eukaryotic, heterotrophic organisms that live as saprobes or parasites, including mushrooms, yeasts, smuts, molds, etc. They reproduce either sexually or asexually, and have life cycles that range from simple to complex. Filamentous fungi refer to those that grow as multicelluar colonies (mushrooms and molds). [NIH]

**Fungicides, Industrial:** Chemicals that kill or inhibit the growth of fungi in agricultural applications, on wood, plastics, or other materials, in swimming pools, etc. [NIH]

**Fungistatic:** Inhibiting the growth of fungi. [EU]

**Fungus:** A general term used to denote a group of eukaryotic protists, including mushrooms, yeasts, rusts, moulds, smuts, etc., which are characterized by the absence of chlorophyll and by the presence of a rigid cell wall composed of chitin, mannans, and sometimes cellulose. They are usually of simple morphological form or show some reversible cellular specialization, such as the formation of pseudoparenchymatous tissue in the fruiting body of a mushroom. The dimorphic fungi grow, according to environmental conditions, as moulds or yeasts. [EU]

**Gas:** Air that comes from normal breakdown of food. The gases are passed out of the body through the rectum (flatus) or the mouth (burp). [NIH]

Gastric: Having to do with the stomach. [NIH]

**Gastrin:** A hormone released after eating. Gastrin causes the stomach to produce more acid. [NIH]

Gastrointestinal: Refers to the stomach and intestines. [NIH]

Gastrointestinal tract: The stomach and intestines. [NIH]

**Gene:** The functional and physical unit of heredity passed from parent to offspring. Genes are pieces of DNA, and most genes contain the information for making a specific protein. [NIH]

**Genital:** Pertaining to the genitalia. [EU]

**Giardiasis:** An infection of the small intestine caused by the flagellated protozoan Giardia lamblia. It is spread via contaminated food and water and by direct person-to-person contact. [NIH]

**Gland:** An organ that produces and releases one or more substances for use in the body. Some glands produce fluids that affect tissues or organs. Others produce hormones or participate in blood production. [NIH]

**Glucocorticoid:** A compound that belongs to the family of compounds called corticosteroids (steroids). Glucocorticoids affect metabolism and have anti-inflammatory and immunosuppressive effects. They may be naturally produced (hormones) or synthetic

(drugs). [NIH]

**Gluconeogenesis:** The process by which glucose is formed from a non-carbohydrate source. [NIH]

**Glucose:** D-Glucose. A primary source of energy for living organisms. It is naturally occurring and is found in fruits and other parts of plants in its free state. It is used therapeutically in fluid and nutrient replacement. [NIH]

**Glucose tolerance:** The power of the normal liver to absorb and store large quantities of glucose and the effectiveness of intestinal absorption of glucose. The glucose tolerance test is a metabolic test of carbohydrate tolerance that measures active insulin, a hepatic function based on the ability of the liver to absorb glucose. The test consists of ingesting 100 grams of glucose into a fasting stomach; blood sugar should return to normal in 2 to 21 hours after ingestion. [NIH]

**Glucose Tolerance Test:** Determination of whole blood or plasma sugar in a fasting state before and at prescribed intervals (usually 1/2 hr, 1 hr, 3 hr, 4 hr) after taking a specified amount (usually 100 gm orally) of glucose. [NIH]

**Glutamic Acid:** A non-essential amino acid naturally occurring in the L-form. Glutamic acid (glutamate) is the most common excitatory neurotransmitter in the central nervous system. [NIH]

**Glutathione Peroxidase:** An enzyme catalyzing the oxidation of 2 moles of glutathione in the presence of hydrogen peroxide to yield oxidized glutathione and water. EC 1.11.1.9. [NIH]

**Glycerol:** A trihydroxy sugar alcohol that is an intermediate in carbohydrate and lipid metabolism. It is used as a solvent, emollient, pharmaceutical agent, and sweetening agent. [NIH]

**Glycerophospholipids:** Derivatives of phosphatidic acid in which the hydrophobic regions are composed of two fatty acids and a polar alcohol is joined to the C-3 position of glycerol through a phosphodiester bond. They are named according to their polar head groups, such as phosphatidylcholine and phosphatidylethanolamine. [NIH]

**Glycine:** A non-essential amino acid. It is found primarily in gelatin and silk fibroin and used therapeutically as a nutrient. It is also a fast inhibitory neurotransmitter. [NIH]

**Glycogen:** A sugar stored in the liver and muscles. It releases glucose into the blood when cells need it for energy. Glycogen is the chief source of stored fuel in the body. [NIH]

**Glycols:** A generic grouping for dihydric alcohols with the hydroxy groups (-OH) located on different carbon atoms. They are viscous liquids with high boiling points for their molecular weights. [NIH]

**Gonadal:** Pertaining to a gonad. [EU]

**Governing Board:** The group in which legal authority is vested for the control of health-related institutions and organizations. [NIH]

**Grade:** The grade of a tumor depends on how abnormal the cancer cells look under a microscope and how quickly the tumor is likely to grow and spread. Grading systems are different for each type of cancer. [NIH]

**Graft:** Healthy skin, bone, or other tissue taken from one part of the body and used to replace diseased or injured tissue removed from another part of the body. [NIH]

**Gram-positive:** Retaining the stain or resisting decolorization by alcohol in Gram's method of staining, a primary characteristic of bacteria whose cell wall is composed of a thick layer of peptidologlycan with attached teichoic acids. [EU]

Granulocytes: Leukocytes with abundant granules in the cytoplasm. They are divided into

three groups: neutrophils, eosinophils, and basophils. [NIH]

**Groin:** The external junctural region between the lower part of the abdomen and the thigh. [NIH]

**Growth:** The progressive development of a living being or part of an organism from its earliest stage to maturity. [NIH]

Hair follicles: Shafts or openings on the surface of the skin through which hair grows. [NIH]

**Hemoglobin:** One of the fractions of glycosylated hemoglobin A1c. Glycosylated hemoglobin is formed when linkages of glucose and related monosaccharides bind to hemoglobin A and its concentration represents the average blood glucose level over the previous several weeks. HbA1c levels are used as a measure of long-term control of plasma glucose (normal, 4 to 6 percent). In controlled diabetes mellitus, the concentration of glycosylated hemoglobin A is within the normal range, but in uncontrolled cases the level may be 3 to 4 times the normal conentration. Generally, complications are substantially lower among patients with Hb levels of 7 percent or less than in patients with HbA1c levels of 9 percent or more. [NIH]

**Hepatic:** Refers to the liver. [NIH]

**Hereditary:** Of, relating to, or denoting factors that can be transmitted genetically from one generation to another. [NIH]

**Heredity:** 1. The genetic transmission of a particular quality or trait from parent to offspring. 2. The genetic constitution of an individual. [EU]

**Herpes:** Any inflammatory skin disease caused by a herpesvirus and characterized by the formation of clusters of small vesicles. When used alone, the term may refer to herpes simplex or to herpes zoster. [EU]

**Herpes Zoster:** Acute vesicular inflammation. [NIH]

**Heterotrophic:** Pertaining to organisms that are consumers and dependent on other organisms for their source of energy (food). [NIH]

**Hidradenitis:** The inflammation of a sweat gland (usually of the apocrine type). The condition can be idiopathic or occur as a result of or in association with another underlying condition. Neutrophilic eccrine hidradenitis is a relatively rare variant that has been reported in patients undergoing chemotherapy, usually for non-Hodgkin lymphomas or leukemic conditions. [NIH]

**Hidradenitis Suppurativa:** A chronic suppurative and cicatricial disease of the apocrine glands occurring chiefly in the axillae in women and in the groin and anal regions in men. It is characterized by poral occlusion with secondary bacterial infection, evolving into abscesses which eventually rupture. As the disease becomes chronic, ulcers appear, sinus tracts enlarge, fistulas develop, and fibrosis and scarring become evident. Hormonal mechanisms are expected in its pathogenesis. [NIH]

**Hirsutism:** Excess hair in females and children with an adult male pattern of distribution. The concept does not include hypertrichosis, which is localized or generalized excess hair. [NIH]

**Histamine:** 1H-Imidazole-4-ethanamine. A depressor amine derived by enzymatic decarboxylation of histidine. It is a powerful stimulant of gastric secretion, a constrictor of bronchial smooth muscle, a vasodilator, and also a centrally acting neurotransmitter. [NIH]

**Histology:** The study of tissues and cells under a microscope. [NIH]

**Homeostasis:** The processes whereby the internal environment of an organism tends to remain balanced and stable. [NIH]

Homologous: Corresponding in structure, position, origin, etc., as (a) the feathers of a bird

Hormonal: Pertaining to or of the nature of a hormone. [EU]

**Hormone:** A substance in the body that regulates certain organs. Hormones such as gastrin help in breaking down food. Some hormones come from cells in the stomach and small intestine. [NIH]

Horny layer: The superficial layer of the epidermis containing keratinized cells. [NIH]

Host: Any animal that receives a transplanted graft. [NIH]

**Human papillomavirus:** HPV. A virus that causes abnormal tissue growth (warts) and is often associated with some types of cancer. [NIH]

**Humoral:** Of, relating to, proceeding from, or involving a bodily humour - now often used of endocrine factors as opposed to neural or somatic. [EU]

**Humour:** 1. A normal functioning fluid or semifluid of the body (as the blood, lymph or bile) especially of vertebrates. 2. A secretion that is itself an excitant of activity (as certain hormones). [EU]

**Hydration:** Combining with water. [NIH]

**Hydrocortisone:** The main glucocorticoid secreted by the adrenal cortex. Its synthetic counterpart is used, either as an injection or topically, in the treatment of inflammation, allergy, collagen diseases, asthma, adrenocortical deficiency, shock, and some neoplastic conditions. [NIH]

**Hydrogen:** The first chemical element in the periodic table. It has the atomic symbol H, atomic number 1, and atomic weight 1. It exists, under normal conditions, as a colorless, odorless, tasteless, diatomic gas. Hydrogen ions are protons. Besides the common H1 isotope, hydrogen exists as the stable isotope deuterium and the unstable, radioactive isotope tritium. [NIH]

**Hydrogen Peroxide:** A strong oxidizing agent used in aqueous solution as a ripening agent, bleach, and topical anti-infective. It is relatively unstable and solutions deteriorate over time unless stabilized by the addition of acetanilide or similar organic materials. [NIH]

**Hydrophilic:** Readily absorbing moisture; hygroscopic; having strongly polar groups that readily interact with water. [EU]

**Hydrophobic:** Not readily absorbing water, or being adversely affected by water, as a hydrophobic colloid. [EU]

**Hydroxylysine:** A hydroxylated derivative of the amino acid lysine that is present in certain collagens. [NIH]

**Hydroxyproline:** A hydroxylated form of the imino acid proline. A deficiency in ascorbic acid can result in impaired hydroxyproline formation. [NIH]

**Hyperplasia:** An increase in the number of cells in a tissue or organ, not due to tumor formation. It differs from hypertrophy, which is an increase in bulk without an increase in the number of cells. [NIH]

**Hyperreactive:** Describes a situation in which a body tissue is especially likely to have an exaggerated reaction to a particular situation. [NIH]

**Hypersensitivity:** Altered reactivity to an antigen, which can result in pathologic reactions upon subsequent exposure to that particular antigen. [NIH]

**Hyperstimulation:** Excessive stimulation. [EU]

Hypertrichosis: Localized or generalized excess hair. The concept does not include hirsutism, which is excess hair in females and children with an adult male pattern of

distribution. [NIH]

**Hypertrophy:** General increase in bulk of a part or organ, not due to tumor formation, nor to an increase in the number of cells. [NIH]

**Hypokinesia:** Slow or diminished movement of body musculature. It may be associated with basal ganglia diseases; mental disorders; prolonged inactivity due to illness; experimental protocols used to evaluate the physiologic effects of immobility; and other conditions. [NIH]

**Hypothalamus:** Ventral part of the diencephalon extending from the region of the optic chiasm to the caudal border of the mammillary bodies and forming the inferior and lateral walls of the third ventricle. [NIH]

**Hypoxic:** Having too little oxygen. [NIH]

**Id:** The part of the personality structure which harbors the unconscious instinctive desires and strivings of the individual. [NIH]

Idiopathic: Describes a disease of unknown cause. [NIH]

Imidazole: C3H4N2. The ring is present in polybenzimidazoles. [NIH]

**Immune response:** The activity of the immune system against foreign substances (antigens). [NIH]

**Immune system:** The organs, cells, and molecules responsible for the recognition and disposal of foreign ("non-self") material which enters the body. [NIH]

**Immunity:** Nonsusceptibility to the invasive or pathogenic effects of foreign microorganisms or to the toxic effect of antigenic substances. [NIH]

**Immunocompromised:** Having a weakened immune system caused by certain diseases or treatments. [NIH]

Immunodeficiency: The decreased ability of the body to fight infection and disease. [NIH]

**Immunologic:** The ability of the antibody-forming system to recall a previous experience with an antigen and to respond to a second exposure with the prompt production of large amounts of antibody. [NIH]

**Immunology:** The study of the body's immune system. [NIH]

Immunosuppressant: An agent capable of suppressing immune responses. [EU]

Immunosuppressive: Describes the ability to lower immune system responses. [NIH]

**Impairment:** In the context of health experience, an impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function. [NIH]

**Impotence:** The inability to perform sexual intercourse. [NIH]

In vitro: In the laboratory (outside the body). The opposite of in vivo (in the body). [NIH]

**In vivo:** In the body. The opposite of in vitro (outside the body or in the laboratory). [NIH]

**Induction:** The act or process of inducing or causing to occur, especially the production of a specific morphogenetic effect in the developing embryo through the influence of evocators or organizers, or the production of anaesthesia or unconsciousness by use of appropriate agents. [EU]

**Infancy:** The period of complete dependency prior to the acquisition of competence in walking, talking, and self-feeding. [NIH]

**Infant, Newborn:** An infant during the first month after birth. [NIH]

**Infarction:** A pathological process consisting of a sudden insufficient blood supply to an area, which results in necrosis of that area. It is usually caused by a thrombus, an embolus,

or a vascular torsion. [NIH]

**Infection:** 1. Invasion and multiplication of microorganisms in body tissues, which may be clinically unapparent or result in local cellular injury due to competitive metabolism, toxins, intracellular replication, or antigen-antibody response. The infection may remain localized, subclinical, and temporary if the body's defensive mechanisms are effective. A local infection may persist and spread by extension to become an acute, subacute, or chronic clinical infection or disease state. A local infection may also become systemic when the microorganisms gain access to the lymphatic or vascular system. 2. An infectious disease. [EU]

**Infiltration:** The diffusion or accumulation in a tissue or cells of substances not normal to it or in amounts of the normal. Also, the material so accumulated. [EU]

Inflammation: A pathological process characterized by injury or destruction of tissues caused by a variety of cytologic and chemical reactions. It is usually manifested by typical signs of pain, heat, redness, swelling, and loss of function. [NIH]

**Ingestion:** Taking into the body by mouth [NIH]

**Inhalation:** The drawing of air or other substances into the lungs. [EU]

**Inorganic:** Pertaining to substances not of organic origin. [EU]

**Insulin:** A protein hormone secreted by beta cells of the pancreas. Insulin plays a major role in the regulation of glucose metabolism, generally promoting the cellular utilization of glucose. It is also an important regulator of protein and lipid metabolism. Insulin is used as a drug to control insulin-dependent diabetes mellitus. [NIH]

**Intestinal:** Having to do with the intestines. [NIH]

**Intracellular:** Inside a cell. [NIH] **Intravenous:** IV. Into a vein. [NIH]

**Invasive:** 1. Having the quality of invasiveness. 2. Involving puncture or incision of the skin or insertion of an instrument or foreign material into the body; said of diagnostic techniques. [EU]

Ions: An atom or group of atoms that have a positive or negative electric charge due to a gain (negative charge) or loss (positive charge) of one or more electrons. Atoms with a positive charge are known as cations; those with a negative charge are anions. [NIH]

**Irradiance:** At a point of a surface, the quotient of the radiant flux incident on an element of the surface containing the point, by the area of that element. [NIH]

Isotretinoin: A topical dermatologic agent that is used in the treatment of acne vulgaris and several other skin diseases. The drug has teratogenic and other adverse effects. [NIH]

Ivermectin: A mixture of ivermectin component B1a (RN 71827-03-7) and B1b (RN 70209-81-3), which is a semisynthetic product from Streptomyces avermitilis. A potent macrocyclic lactone disaccharide antiparasitic agent used to prevent and treat parasite infestations in animals. The compound has activity against internal and external parasites and has been found effective against arthropods, insects, nematodes, filarioidea, platyhelminths, and protozoa. [NIH]

Kaposi: A tumor characterized by development, essentially in men, of violet red patches and nodules on the skin. This disease also affects deeper organs. [NIH]

**Kb:** A measure of the length of DNA fragments, 1 Kb = 1000 base pairs. The largest DNA fragments are up to 50 kilobases long. [NIH]

Keratin: A class of fibrous proteins or scleroproteins important both as structural proteins and as keys to the study of protein conformation. The family represents the principal

constituent of epidermis, hair, nails, horny tissues, and the organic matrix of tooth enamel. Two major conformational groups have been characterized, alpha-keratin, whose peptide backbone forms an alpha-helix, and beta-keratin, whose backbone forms a zigzag or pleated sheet structure. [NIH]

**Keratinocytes:** Epidermal cells which synthesize keratin and undergo characteristic changes as they move upward from the basal layers of the epidermis to the cornified (horny) layer of the skin. Successive stages of differentiation of the keratinocytes forming the epidermal layers are basal cell, spinous or prickle cell, and the granular cell. [NIH]

**Keratolytic:** An agent that promotes keratolysis. [EU]

**Keratolytic Agents:** Agents that soften, separate, and cause desquamation of the cornified epithelium or horny layer of skin. They are used to expose mycelia of infecting fungi or to treat corns, warts, and certain other skin diseases. [NIH]

**Keto:** It consists of 8 carbon atoms and within the endotoxins, it connects poysaccharide and lipid A. [NIH]

**Ketoconazole:** Broad spectrum antifungal agent used for long periods at high doses, especially in immunosuppressed patients. [NIH]

**Lacrimal:** Pertaining to the tears. [EU]

**Lanolin:** A yellow fat obtained from sheep's wool. It is used as an emollient, cosmetic, and pharmaceutic aid. [NIH]

Leukemia: Cancer of blood-forming tissue. [NIH]

**Leukocytes:** White blood cells. These include granular leukocytes (basophils, eosinophils, and neutrophils) as well as non-granular leukocytes (lymphocytes and monocytes). [NIH]

**Leukoplakia:** A white patch that may develop on mucous membranes such as the cheek, gums, or tongue and may become cancerous. [NIH]

**Levodopa:** The naturally occurring form of dopa and the immediate precursor of dopamine. Unlike dopamine itself, it can be taken orally and crosses the blood-brain barrier. It is rapidly taken up by dopaminergic neurons and converted to dopamine. It is used for the treatment of parkinsonism and is usually given with agents that inhibit its conversion to dopamine outside of the central nervous system. [NIH]

**Libido:** The psychic drive or energy associated with sexual instinct in the broad sense (pleasure and love-object seeking). It may also connote the psychic energy associated with instincts in general that motivate behavior. [NIH]

**Library Services:** Services offered to the library user. They include reference and circulation. [NIH]

**Life cycle:** The successive stages through which an organism passes from fertilized ovum or spore to the fertilized ovum or spore of the next generation. [NIH]

**Ligament:** A band of fibrous tissue that connects bones or cartilages, serving to support and strengthen joints. [EU]

**Lipid:** Fat. [NIH]

Lipophilic: Having an affinity for fat; pertaining to or characterized by lipophilia. [EU]

**Lithium:** An element in the alkali metals family. It has the atomic symbol Li, atomic number 3, and atomic weight 6.94. Salts of lithium are used in treating manic-depressive disorders. [NIH]

**Liver:** A large, glandular organ located in the upper abdomen. The liver cleanses the blood and aids in digestion by secreting bile. [NIH]

**Lobe:** A portion of an organ such as the liver, lung, breast, or brain. [NIH]

**Localized:** Cancer which has not metastasized yet. [NIH]

Lupus: A form of cutaneous tuberculosis. It is seen predominantly in women and typically involves the nasal, buccal, and conjunctival mucosa. [NIH]

Lymph: The almost colorless fluid that travels through the lymphatic system and carries cells that help fight infection and disease. [NIH]

**Lymph node:** A rounded mass of lymphatic tissue that is surrounded by a capsule of connective tissue. Also known as a lymph gland. Lymph nodes are spread out along lymphatic vessels and contain many lymphocytes, which filter the lymphatic fluid (lymph). [NIH]

**Lymphadenopathy:** Disease or swelling of the lymph nodes. [NIH]

Lymphatic: The tissues and organs, including the bone marrow, spleen, thymus, and lymph nodes, that produce and store cells that fight infection and disease. [NIH]

**Lymphatic system:** The tissues and organs that produce, store, and carry white blood cells that fight infection and other diseases. This system includes the bone marrow, spleen, thymus, lymph nodes and a network of thin tubes that carry lymph and white blood cells. These tubes branch, like blood vessels, into all the tissues of the body. [NIH]

Lymphocyte: A white blood cell. Lymphocytes have a number of roles in the immune system, including the production of antibodies and other substances that fight infection and diseases. [NIH]

**Lymphocyte Count:** A count of the number of lymphocytes in the blood. [NIH]

Lymphoid: Referring to lymphocytes, a type of white blood cell. Also refers to tissue in which lymphocytes develop. [NIH]

Malignancy: A cancerous tumor that can invade and destroy nearby tissue and spread to other parts of the body. [NIH]

Malignant: Cancerous; a growth with a tendency to invade and destroy nearby tissue and spread to other parts of the body. [NIH]

**Malnutrition:** A condition caused by not eating enough food or not eating a balanced diet. [NIH]

Manic: Affected with mania. [EU]

Manifest: Being the part or aspect of a phenomenon that is directly observable : concretely expressed in behaviour. [EU]

Mannans: Polysaccharides consisting of mannose units. [NIH]

**Mediator:** An object or substance by which something is mediated, such as (1) a structure of the nervous system that transmits impulses eliciting a specific response; (2) a chemical substance (transmitter substance) that induces activity in an excitable tissue, such as nerve or muscle; or (3) a substance released from cells as the result of the interaction of antigen with antibody or by the action of antigen with a sensitized lymphocyte. [EU]

MEDLINE: An online database of MEDLARS, the computerized bibliographic Medical Literature Analysis and Retrieval System of the National Library of Medicine. [NIH]

**Meibomian:** A series of simple, branched, alveolar, sebaceous glands, located in the tarso of the eyelids, whose ducts empty into the eyelid margins in line with and lateral to the lacrimal puncta. [NIH]

Meiosis: A special method of cell division, occurring in maturation of the germ cells, by means of which each daughter nucleus receives half the number of chromosomes characteristic of the somatic cells of the species. [NIH]

**Melanoma:** A form of skin cancer that arises in melanocytes, the cells that produce pigment.

Melanoma usually begins in a mole. [NIH]

**Membrane:** A very thin layer of tissue that covers a surface. [NIH]

**Membrane Lipids:** Lipids, predominantly phospholipids, cholesterol and small amounts of glycolipids found in membranes including cellular and intracellular membranes. These lipids may be arranged in bilayers in the membranes with integral proteins between the layers and peripheral proteins attached to the outside. Membrane lipids are required for active transport, several enzymatic activities and membrane formation. [NIH]

**Meningitis:** Inflammation of the meninges. When it affects the dura mater, the disease is termed pachymeningitis; when the arachnoid and pia mater are involved, it is called leptomeningitis, or meningitis proper. [EU]

Mental: Pertaining to the mind; psychic. 2. (L. mentum chin) pertaining to the chin. [EU]

Menthol: An alcohol produced from mint oils or prepared synthetically. [NIH]

**Methionine:** A sulfur containing essential amino acid that is important in many body functions. It is a chelating agent for heavy metals. [NIH]

**Methotrexate:** An antineoplastic antimetabolite with immunosuppressant properties. It is an inhibitor of dihydrofolate reductase and prevents the formation of tetrahydrofolate, necessary for synthesis of thymidylate, an essential component of DNA. [NIH]

**Methylene Blue:** A compound consisting of dark green crystals or crystalline powder, having a bronze-like luster. Solutions in water or alcohol have a deep blue color. Methylene blue is used as a bacteriologic stain and as an indicator. It inhibits Guanylate cyclase, and has been used to treat cyanide poisoning and to lower levels of methemoglobin. [NIH]

**Methylene Chloride:** A chlorinated hydrocarbon that has been used as an inhalation anesthetic and acts as a narcotic in high concentrations. Its primary use is as a solvent in manufacturing and food technology. [NIH]

**Metronidazole:** Antiprotozoal used in amebiasis, trichomoniasis, giardiasis, and as treponemacide in livestock. It has also been proposed as a radiation sensitizer for hypoxic cells. According to the Fourth Annual Report on Carcinogens (NTP 85-002, 1985, p133), this substance may reasonably be anticipated to be a carcinogen (Merck, 11th ed). [NIH]

MI: Myocardial infarction. Gross necrosis of the myocardium as a result of interruption of the blood supply to the area; it is almost always caused by atherosclerosis of the coronary arteries, upon which coronary thrombosis is usually superimposed. [NIH]

**Microbe:** An organism which cannot be observed with the naked eye; e. g. unicellular animals, lower algae, lower fungi, bacteria. [NIH]

**Microbiological:** Pertaining to microbiology: the science that deals with microorganisms, including algae, bacteria, fungi, protozoa and viruses. [EU]

**Microbiology:** The study of microorganisms such as fungi, bacteria, algae, archaea, and viruses. [NIH]

**Milliliter:** A measure of volume for a liquid. A milliliter is approximately 950-times smaller than a quart and 30-times smaller than a fluid ounce. A milliliter of liquid and a cubic centimeter (cc) of liquid are the same. [NIH]

**Modification:** A change in an organism, or in a process in an organism, that is acquired from its own activity or environment. [NIH]

**Molecular:** Of, pertaining to, or composed of molecules: a very small mass of matter. [EU]

**Molecule:** A chemical made up of two or more atoms. The atoms in a molecule can be the same (an oxygen molecule has two oxygen atoms) or different (a water molecule has two hydrogen atoms and one oxygen atom). Biological molecules, such as proteins and DNA,

can be made up of many thousands of atoms. [NIH]

**Monocytes:** Large, phagocytic mononuclear leukocytes produced in the vertebrate bone marrow and released into the blood; contain a large, oval or somewhat indented nucleus surrounded by voluminous cytoplasm and numerous organelles. [NIH]

Mononuclear: A cell with one nucleus. [NIH]

**Morphological:** Relating to the configuration or the structure of live organs. [NIH]

**Morphology:** The science of the form and structure of organisms (plants, animals, and other forms of life). [NIH]

Mucosa: A mucous membrane, or tunica mucosa. [EU]

**Multivalent:** Pertaining to a group of 5 or more homologous or partly homologous chromosomes during the zygotene stage of prophase to first metaphasis in meiosis. [NIH]

**Myocardium:** The muscle tissue of the heart composed of striated, involuntary muscle known as cardiac muscle. [NIH]

**Narcotic:** 1. Pertaining to or producing narcosis. 2. An agent that produces insensibility or stupor, applied especially to the opioids, i.e. to any natural or synthetic drug that has morphine-like actions. [EU]

**Need:** A state of tension or dissatisfaction felt by an individual that impels him to action toward a goal he believes will satisfy the impulse. [NIH]

Neoplasia: Abnormal and uncontrolled cell growth. [NIH]

Neoplasm: A new growth of benign or malignant tissue. [NIH]

**Neoplastic:** Pertaining to or like a neoplasm (= any new and abnormal growth); pertaining to neoplasia (= the formation of a neoplasm). [EU]

**Nerve:** A cordlike structure of nervous tissue that connects parts of the nervous system with other tissues of the body and conveys nervous impulses to, or away from, these tissues. [NIH]

**Nervous System:** The entire nerve apparatus composed of the brain, spinal cord, nerves and ganglia. [NIH]

**Neural:** 1. Pertaining to a nerve or to the nerves. 2. Situated in the region of the spinal axis, as the neutral arch. [EU]

**Neuroleptic:** A term coined to refer to the effects on cognition and behaviour of antipsychotic drugs, which produce a state of apathy, lack of initiative, and limited range of emotion and in psychotic patients cause a reduction in confusion and agitation and normalization of psychomotor activity. [EU]

Neuronal: Pertaining to a neuron or neurons (= conducting cells of the nervous system). [EU]

**Neurons:** The basic cellular units of nervous tissue. Each neuron consists of a body, an axon, and dendrites. Their purpose is to receive, conduct, and transmit impulses in the nervous system. [NIH]

**Neuropeptides:** Peptides released by neurons as intercellular messengers. Many neuropeptides are also hormones released by non-neuronal cells. [NIH]

**Neurotransmitter:** Any of a group of substances that are released on excitation from the axon terminal of a presynaptic neuron of the central or peripheral nervous system and travel across the synaptic cleft to either excite or inhibit the target cell. Among the many substances that have the properties of a neurotransmitter are acetylcholine, norepinephrine, epinephrine, dopamine, glycine, y-aminobutyrate, glutamic acid, substance P, enkephalins, endorphins, and serotonin. [EU]

Neutrons: Electrically neutral elementary particles found in all atomic nuclei except light

hydrogen; the mass is equal to that of the proton and electron combined and they are unstable when isolated from the nucleus, undergoing beta decay. Slow, thermal, epithermal, and fast neutrons refer to the energy levels with which the neutrons are ejected from heavier nuclei during their decay. [NIH]

**Neutrophils:** Granular leukocytes having a nucleus with three to five lobes connected by slender threads of chromatin, and cytoplasm containing fine inconspicuous granules and stainable by neutral dyes. [NIH]

**Niacin:** Water-soluble vitamin of the B complex occurring in various animal and plant tissues. Required by the body for the formation of coenzymes NAD and NADP. Has pellagra-curative, vasodilating, and antilipemic properties. [NIH]

**Nickel:** A trace element with the atomic symbol Ni, atomic number 28, and atomic weight 58.69. It is a cofactor of the enzyme urease. [NIH]

**Nitrogen:** An element with the atomic symbol N, atomic number 7, and atomic weight 14. Nitrogen exists as a diatomic gas and makes up about 78% of the earth's atmosphere by volume. It is a constituent of proteins and nucleic acids and found in all living cells. [NIH]

**Norepinephrine:** Precursor of epinephrine that is secreted by the adrenal medulla and is a widespread central and autonomic neurotransmitter. Norepinephrine is the principal transmitter of most postganglionic sympathetic fibers and of the diffuse projection system in the brain arising from the locus ceruleus. It is also found in plants and is used pharmacologically as a sympathomimetic. [NIH]

**Nucleus:** A body of specialized protoplasm found in nearly all cells and containing the chromosomes. [NIH]

Ocular: 1. Of, pertaining to, or affecting the eye. 2. Eyepiece. [EU]

**Ointments:** Semisolid preparations used topically for protective emollient effects or as a vehicle for local administration of medications. Ointment bases are various mixtures of fats, waxes, animal and plant oils and solid and liquid hydrocarbons. [NIH]

Onychomycosis: Mycosis of the nails, possibly due to some extent to humidity. [NIH]

Opacity: Degree of density (area most dense taken for reading). [NIH]

**Ophthalmic:** Pertaining to the eye. [EU]

**Opportunistic Infections:** An infection caused by an organism which becomes pathogenic under certain conditions, e.g., during immunosuppression. [NIH]

**Optic Chiasm:** The X-shaped structure formed by the meeting of the two optic nerves. At the optic chiasm the fibers from the medial part of each retina cross to project to the other side of the brain while the lateral retinal fibers continue on the same side. As a result each half of the brain receives information about the contralateral visual field from both eyes. [NIH]

**Optic Disk:** The portion of the optic nerve seen in the fundus with the ophthalmoscope. It is formed by the meeting of all the retinal ganglion cell axons as they enter the optic nerve. [NIH]

**Organelles:** Specific particles of membrane-bound organized living substances present in eukaryotic cells, such as the mitochondria; the golgi apparatus; endoplasmic reticulum; lysomomes; plastids; and vacuoles. [NIH]

**Osmotic:** Pertaining to or of the nature of osmosis (= the passage of pure solvent from a solution of lesser to one of greater solute concentration when the two solutions are separated by a membrane which selectively prevents the passage of solute molecules, but is permeable to the solvent). [EU]

Otitis: Inflammation of the ear, which may be marked by pain, fever, abnormalities of

hearing, hearing loss, tinnitus, and vertigo. [EU]

**Oxidation:** The act of oxidizing or state of being oxidized. Chemically it consists in the increase of positive charges on an atom or the loss of negative charges. Most biological oxidations are accomplished by the removal of a pair of hydrogen atoms (dehydrogenation) from a molecule. Such oxidations must be accompanied by reduction of an acceptor molecule. Univalent o. indicates loss of one electron; divalent o., the loss of two electrons.

**Palliative:** 1. Affording relief, but not cure. 2. An alleviating medicine. [EU]

Pancreas: A mixed exocrine and endocrine gland situated transversely across the posterior abdominal wall in the epigastric and hypochondriac regions. The endocrine portion is comprised of the Islets of Langerhans, while the exocrine portion is a compound acinar gland that secretes digestive enzymes. [NIH]

Papilla: A small nipple-shaped elevation. [NIH]

**Papillary:** Pertaining to or resembling papilla, or nipple. [EU]

Papillomavirus: A genus of Papovaviridae causing proliferation of the epithelium, which may lead to malignancy. A wide range of animals are infected including humans, chimpanzees, cattle, rabbits, dogs, and horses. [NIH]

Parasite: An animal or a plant that lives on or in an organism of another species and gets at least some of its nutrition from that other organism. [NIH]

Paresthesia: Subjective cutaneous sensations (e.g., cold, warmth, tingling, pressure, etc.) that are experienced spontaneously in the absence of stimulation. [NIH]

Parkinsonism: A group of neurological disorders characterized by hypokinesia, tremor, and muscular rigidity. [EU]

**Partial remission:** The shrinking, but not complete disappearance, of a tumor in response to therapy. Also called partial response. [NIH]

**Patch:** A piece of material used to cover or protect a wound, an injured part, etc.: a patch over the eye. [NIH]

Pathogenesis: The cellular events and reactions that occur in the development of disease. [NIH]

Pathologic: 1. Indicative of or caused by a morbid condition. 2. Pertaining to pathology (= branch of medicine that treats the essential nature of the disease, especially the structural and functional changes in tissues and organs of the body caused by the disease). [EU]

Pathophysiology: Altered functions in an individual or an organ due to disease. [NIH]

**Patient Education:** The teaching or training of patients concerning their own health needs. [NIH]

**Pelvic:** Pertaining to the pelvis. [EU]

**Penicillin:** An antibiotic drug used to treat infection. [NIH]

**Pepsin:** An enzyme made in the stomach that breaks down proteins. [NIH]

**Pepsin A:** Formed from pig pepsinogen by cleavage of one peptide bond. The enzyme is a single polypeptide chain and is inhibited by methyl 2-diaazoacetamidohexanoate. It cleaves peptides preferentially at the carbonyl linkages of phenylalanine or leucine and acts as the principal digestive enzyme of gastric juice. [NIH]

Peptide: Any compound consisting of two or more amino acids, the building blocks of proteins. Peptides are combined to make proteins. [NIH]

**Perception:** The ability quickly and accurately to recognize similarities and differences

among presented objects, whether these be pairs of words, pairs of number series, or multiple sets of these or other symbols such as geometric figures. [NIH]

**Perioral:** Situated or occurring around the mouth. [EU]

**Peripheral Nervous System:** The nervous system outside of the brain and spinal cord. The peripheral nervous system has autonomic and somatic divisions. The autonomic nervous system includes the enteric, parasympathetic, and sympathetic subdivisions. The somatic nervous system includes the cranial and spinal nerves and their ganglia and the peripheral sensory receptors. [NIH]

**Peroxide:** Chemical compound which contains an atom group with two oxygen atoms tied to each other. [NIH]

**Petrolatum:** A colloidal system of semisolid hydrocarbons obtained from petroleum. It is used as an ointment base, topical protectant, and lubricant. [NIH]

**Pharmaceutical Preparations:** Drugs intended for human or veterinary use, presented in their finished dosage form. Included here are materials used in the preparation and/or formulation of the finished dosage form. [NIH]

Pharmacologic: Pertaining to pharmacology or to the properties and reactions of drugs. [EU]

**Phenolphthalein:** An acid-base indicator which is colorless in acid solution, but turns pink to red as the solution becomes alkaline. It is used medicinally as a cathartic. [NIH]

**Phospholipids:** Lipids containing one or more phosphate groups, particularly those derived from either glycerol (phosphoglycerides; glycerophospholipids) or sphingosine (sphingolipids). They are polar lipids that are of great importance for the structure and function of cell membranes and are the most abundant of membrane lipids, although not stored in large amounts in the system. [NIH]

**Photodynamic therapy:** Treatment with drugs that become active when exposed to light. These drugs kill cancer cells. [NIH]

**Phototherapy:** Treatment of disease by exposure to light, especially by variously concentrated light rays or specific wavelengths. [NIH]

**Physiologic:** Having to do with the functions of the body. When used in the phrase "physiologic age," it refers to an age assigned by general health, as opposed to calendar age. [NIH]

**Pilot study:** The initial study examining a new method or treatment. [NIH]

**Pituitary Gland:** A small, unpaired gland situated in the sella turcica tissue. It is connected to the hypothalamus by a short stalk. [NIH]

**Pityriasis:** A name originally applied to a group of skin diseases characterized by the formation of fine, branny scales, but now used only with a modifier. [EU]

Plant Oils: Oils derived from plants or plant products. [NIH]

**Plants:** Multicellular, eukaryotic life forms of the kingdom Plantae. They are characterized by a mainly photosynthetic mode of nutrition; essentially unlimited growth at localized regions of cell divisions (meristems); cellulose within cells providing rigidity; the absence of organs of locomotion; absense of nervous and sensory systems; and an alteration of haploid and diploid generations. [NIH]

**Plasma:** The clear, yellowish, fluid part of the blood that carries the blood cells. The proteins that form blood clots are in plasma. [NIH]

Plasma cells: A type of white blood cell that produces antibodies. [NIH]

Plasma protein: One of the hundreds of different proteins present in blood plasma, including carrier proteins ( such albumin, transferrin, and haptoglobin), fibrinogen and

other coagulation factors, complement components, immunoglobulins, enzyme inhibitors, precursors of substances such as angiotension and bradykinin, and many other types of proteins. [EU]

Platyhelminths: A phylum of acoelomate, bilaterally symmetrical flatworms, without a definite anus. It includes three classes: Cestoda, Turbellaria, and Trematoda. [NIH]

**Pneumonia:** Inflammation of the lungs. [NIH]

Poisoning: A condition or physical state produced by the ingestion, injection or inhalation of, or exposure to a deleterious agent. [NIH]

**Polymers:** Compounds formed by the joining of smaller, usually repeating, units linked by covalent bonds. These compounds often form large macromolecules (e.g., polypeptides, proteins, plastics). [NIH]

Polysaccharide: A type of carbohydrate. It contains sugar molecules that are linked together chemically. [NIH]

Polyunsaturated fat: An unsaturated fat found in greatest amounts in foods derived from plants, including safflower, sunflower, corn, and soybean oils. [NIH]

**Postoperative:** After surgery. [NIH]

**Potassium:** An element that is in the alkali group of metals. It has an atomic symbol K, atomic number 19, and atomic weight 39.10. It is the chief cation in the intracellular fluid of muscle and other cells. Potassium ion is a strong electrolyte and it plays a significant role in the regulation of fluid volume and maintenance of the water-electrolyte balance. [NIH]

Potassium Chloride: Potassium chloride. A white crystall or crystalline powder used as an electrolyte replenisher, in the treatment of hypokalemia, in buffer solutions, and in fertilizers and explosives. [NIH]

**Potassium Citrate:** A powder that dissolves in water, which is administered orally, and is used as a diuretic, expectorant, systemic alkalizer, and electrolyte replenisher. [NIH]

Practice Guidelines: Directions or principles presenting current or future rules of policy for the health care practitioner to assist him in patient care decisions regarding diagnosis, therapy, or related clinical circumstances. The guidelines may be developed by government agencies at any level, institutions, professional societies, governing boards, or by the convening of expert panels. The guidelines form a basis for the evaluation of all aspects of health care and delivery. [NIH]

Precursor: Something that precedes. In biological processes, a substance from which another, usually more active or mature substance is formed. In clinical medicine, a sign or symptom that heralds another. [EU]

**Pregnancy Maintenance:** Physiological mechanisms that sustain the state of pregnancy.

**Presynaptic:** Situated proximal to a synapse, or occurring before the synapse is crossed. [EU]

**Prevalence:** The total number of cases of a given disease in a specified population at a designated time. It is differentiated from incidence, which refers to the number of new cases in the population at a given time. [NIH]

Prickle: Several layers of the epidermis where the individual cells are connected by cell bridges. [NIH]

**Progesterone:** Pregn-4-ene-3,20-dione. The principal progestational hormone of the body, secreted by the corpus luteum, adrenal cortex, and placenta. Its chief function is to prepare the uterus for the reception and development of the fertilized ovum. It acts as an antiovulatory agent when administered on days 5-25 of the menstrual cycle. [NIH]

**Progressive:** Advancing; going forward; going from bad to worse; increasing in scope or severity. [EU]

**Proline:** A non-essential amino acid that is synthesized from glutamic acid. It is an essential component of collagen and is important for proper functioning of joints and tendons. [NIH]

**Pro-Opiomelanocortin:** A precursor protein, MW 30,000, synthesized mainly in the anterior pituitary gland but also found in the hypothalamus, brain, and several peripheral tissues. It incorporates the amino acid sequences of ACTH and beta-lipotropin. These two hormones, in turn, contain the biologically active peptides MSH, corticotropin-like intermediate lobe peptide, alpha-lipotropin, endorphins, and methionine enkephalin. [NIH]

**Prophase:** The first phase of cell division, in which the chromosomes become visible, the nucleus starts to lose its identity, the spindle appears, and the centrioles migrate toward opposite poles. [NIH]

**Prophylaxis:** An attempt to prevent disease. [NIH]

**Propionibacterium:** A genus of gram-positive, rod-shaped bacteria whose cells occur singly, in pairs or short chains, in V or Y configurations, or in clumps resembling letters of the Chinese alphabet. Its organisms are found in cheese and dairy products as well as on human skin and can occasionally cause soft tissue infections. [NIH]

**Propionibacterium acnes:** A bacteria isolated from normal skin, intestinal contents, wounds, blood, pus, and soft tissue abscesses. It is a common contaminant of clinical specimens, presumably from the skin of patients or attendants. [NIH]

**Propylene Glycol:** A clear, colorless, viscous organic solvent and diluent used in pharmaceutical preparations. [NIH]

**Prostate:** A gland in males that surrounds the neck of the bladder and the urethra. It secretes a substance that liquifies coagulated semen. It is situated in the pelvic cavity behind the lower part of the pubic symphysis, above the deep layer of the triangular ligament, and rests upon the rectum. [NIH]

**Prostate gland:** A gland in the male reproductive system just below the bladder. It surrounds part of the urethra, the canal that empties the bladder, and produces a fluid that forms part of semen. [NIH]

**Prostatic Hyperplasia:** Enlargement or overgrowth of the prostate gland as a result of an increase in the number of its constituent cells. [NIH]

**Protease:** Proteinase (= any enzyme that catalyses the splitting of interior peptide bonds in a protein). [EU]

**Protein C:** A vitamin-K dependent zymogen present in the blood, which, upon activation by thrombin and thrombomodulin exerts anticoagulant properties by inactivating factors Va and VIIIa at the rate-limiting steps of thrombin formation. [NIH]

**Protein S:** The vitamin K-dependent cofactor of activated protein C. Together with protein C, it inhibits the action of factors VIIIa and Va. A deficiency in protein S can lead to recurrent venous and arterial thrombosis. [NIH]

**Proteins:** Polymers of amino acids linked by peptide bonds. The specific sequence of amino acids determines the shape and function of the protein. [NIH]

**Protons:** Stable elementary particles having the smallest known positive charge, found in the nuclei of all elements. The proton mass is less than that of a neutron. A proton is the nucleus of the light hydrogen atom, i.e., the hydrogen ion. [NIH]

**Protozoa:** A subkingdom consisting of unicellular organisms that are the simplest in the animal kingdom. Most are free living. They range in size from submicroscopic to

macroscopic. Protozoa are divided into seven phyla: Sarcomastigophora, Labyrinthomorpha, Apicomplexa, Microspora, Ascetospora, Myxozoa, and Ciliophora. [NIH]

**Provirus:** Virus that is integrated into the chromosome of a host cell and is transmitted in that form from one host cell generation to another without leading to the lysis of the host cells. [NIH]

**Proximal:** Nearest; closer to any point of reference; opposed to distal. [EU]

**Pruritic:** Pertaining to or characterized by pruritus. [EU]

**Pruritus:** An intense itching sensation that produces the urge to rub or scratch the skin to obtain relief. [NIH]

**Psoriasis:** A common genetically determined, chronic, inflammatory skin disease characterized by rounded erythematous, dry, scaling patches. The lesions have a predilection for nails, scalp, genitalia, extensor surfaces, and the lumbosacral region. Accelerated epidermopoiesis is considered to be the fundamental pathologic feature in psoriasis. [NIH]

**Psychic:** Pertaining to the psyche or to the mind; mental. [EU]

**Psychomotor:** Pertaining to motor effects of cerebral or psychic activity. [EU]

**Puberty:** The period during which the secondary sex characteristics begin to develop and the capability of sexual reproduction is attained. [EU]

**Public Policy:** A course or method of action selected, usually by a government, from among alternatives to guide and determine present and future decisions. [NIH]

**Pulmonary:** Relating to the lungs. [NIH]

**Pustular:** Pertaining to or of the nature of a pustule; consisting of pustules (= a visible collection of pus within or beneath the epidermis). [EU]

**Pyridones:** Pyridine derivatives with one or more keto groups on the ring. [NIH]

**Quality of Life:** A generic concept reflecting concern with the modification and enhancement of life attributes, e.g., physical, political, moral and social environment. [NIH]

**Quaternary:** 1. Fourth in order. 2. Containing four elements or groups. [EU]

**Race:** A population within a species which exhibits general similarities within itself, but is both discontinuous and distinct from other populations of that species, though not sufficiently so as to achieve the status of a taxon. [NIH]

**Racemic:** Optically inactive but resolvable in the way of all racemic compounds. [NIH]

**Radiation:** Emission or propagation of electromagnetic energy (waves/rays), or the waves/rays themselves; a stream of electromagnetic particles (electrons, neutrons, protons, alpha particles) or a mixture of these. The most common source is the sun. [NIH]

Radioactive: Giving off radiation. [NIH]

**Randomized:** Describes an experiment or clinical trial in which animal or human subjects are assigned by chance to separate groups that compare different treatments. [NIH]

**Receptor:** A molecule inside or on the surface of a cell that binds to a specific substance and causes a specific physiologic effect in the cell. [NIH]

**Rectum:** The last 8 to 10 inches of the large intestine. [NIH]

**Recurrence:** The return of a sign, symptom, or disease after a remission. [NIH]

**Reductase:** Enzyme converting testosterone to dihydrotestosterone. [NIH]

**Refer:** To send or direct for treatment, aid, information, de decision. [NIH]

Refraction: A test to determine the best eyeglasses or contact lenses to correct a refractive

error (myopia, hyperopia, or astigmatism). [NIH]

**Regimen:** A treatment plan that specifies the dosage, the schedule, and the duration of treatment. [NIH]

Relapse: The return of signs and symptoms of cancer after a period of improvement. [NIH]

**Remission:** A decrease in or disappearance of signs and symptoms of cancer. In partial remission, some, but not all, signs and symptoms of cancer have disappeared. In complete remission, all signs and symptoms of cancer have disappeared, although there still may be cancer in the body. [NIH]

**Reticular:** Coarse-fibered, netlike dermis layer. [NIH]

**Retina:** The ten-layered nervous tissue membrane of the eye. It is continuous with the optic nerve and receives images of external objects and transmits visual impulses to the brain. Its outer surface is in contact with the choroid and the inner surface with the vitreous body. The outer-most layer is pigmented, whereas the inner nine layers are transparent. [NIH]

**Retinal:** 1. Pertaining to the retina. 2. The aldehyde of retinol, derived by the oxidative enzymatic splitting of absorbed dietary carotene, and having vitamin A activity. In the retina, retinal combines with opsins to form visual pigments. One isomer, 11-cis retinal combines with opsin in the rods (scotopsin) to form rhodopsin, or visual purple. Another, all-trans retinal (trans-r.); visual yellow; xanthopsin) results from the bleaching of rhodopsin by light, in which the 11-cis form is converted to the all-trans form. Retinal also combines with opsins in the cones (photopsins) to form the three pigments responsible for colour vision. Called also retinal, and retinene1. [EU]

**Retinoid:** Vitamin A or a vitamin A-like compound. [NIH]

**Rheumatism:** A group of disorders marked by inflammation or pain in the connective tissue structures of the body. These structures include bone, cartilage, and fat. [NIH]

**Rhinophyma:** A manifestation of severe Acne rosacea resulting in significant enlargement of the nose and occurring primarily in men. It is caused by hypertrophy of the sebaceous glands and surrounding connective tissue. The nose is reddened and marked with numerous telangiectasias. [NIH]

Rigidity: Stiffness or inflexibility, chiefly that which is abnormal or morbid; rigor. [EU]

**Risk factor:** A habit, trait, condition, or genetic alteration that increases a person's chance of developing a disease. [NIH]

**Rod:** A reception for vision, located in the retina. [NIH]

Salicylate: Non-steroidal anti-inflammatory drugs. [NIH]

Salicylic: A tuberculosis drug. [NIH]

**Saponins:** Sapogenin glycosides. A type of glycoside widely distributed in plants. Each consists of a sapogenin as the aglycon moiety, and a sugar. The sapogenin may be a steroid or a triterpene and the sugar may be glucose, galactose, a pentose, or a methylpentose. Sapogenins are poisonous towards the lower forms of life and are powerful hemolytics when injected into the blood stream able to dissolve red blood cells at even extreme dilutions. [NIH]

**Sarcoma:** A connective tissue neoplasm formed by proliferation of mesodermal cells; it is usually highly malignant. [NIH]

**Scatter:** The extent to which relative success and failure are divergently manifested in qualitatively different tests. [NIH]

**Screening:** Checking for disease when there are no symptoms. [NIH]

**Sebaceous:** Gland that secretes sebum. [NIH]

**Seborrhea:** Hypersecretion of sebum with excessive oily secretion from the sweat glands. [NIH]

**Seborrhoea:** 1. Excessive secretion of sebum; called also hypersteatosis 2. Seborrhoeic dermatitis. [EU]

**Sebum:** The oily substance secreted by sebaceous glands. It is composed of keratin, fat, and cellular debris. [NIH]

**Secretion:** 1. The process of elaborating a specific product as a result of the activity of a gland; this activity may range from separating a specific substance of the blood to the elaboration of a new chemical substance. 2. Any substance produced by secretion. [EU]

**Selenium:** An element with the atomic symbol Se, atomic number 34, and atomic weight 78.96. It is an essential micronutrient for mammals and other animals but is toxic in large amounts. Selenium protects intracellular structures against oxidative damage. It is an essential component of glutathione peroxidase. [NIH]

**Semen:** The thick, yellowish-white, viscid fluid secretion of male reproductive organs discharged upon ejaculation. In addition to reproductive organ secretions, it contains spermatozoa and their nutrient plasma. [NIH]

Semisynthetic: Produced by chemical manipulation of naturally occurring substances. [EU]

**Sepsis:** The presence of bacteria in the bloodstream. [NIH]

**Serotonin:** A biochemical messenger and regulator, synthesized from the essential amino acid L-tryptophan. In humans it is found primarily in the central nervous system, gastrointestinal tract, and blood platelets. Serotonin mediates several important physiological functions including neurotransmission, gastrointestinal motility, hemostasis, and cardiovascular integrity. Multiple receptor families (receptors, serotonin) explain the broad physiological actions and distribution of this biochemical mediator. [NIH]

**Serum:** The clear liquid part of the blood that remains after blood cells and clotting proteins have been removed. [NIH]

**Sex Characteristics:** Those characteristics that distinguish one sex from the other. The primary sex characteristics are the ovaries and testes and their related hormones. Secondary sex characteristics are those which are masculine or feminine but not directly related to reproduction. [NIH]

**Shedding:** Release of infectious particles (e. g., bacteria, viruses) into the environment, for example by sneezing, by fecal excretion, or from an open lesion. [NIH]

**Shock:** The general bodily disturbance following a severe injury; an emotional or moral upset occasioned by some disturbing or unexpected experience; disruption of the circulation, which can upset all body functions: sometimes referred to as circulatory shock. [NIH]

**Side effect:** A consequence other than the one(s) for which an agent or measure is used, as the adverse effects produced by a drug, especially on a tissue or organ system other than the one sought to be benefited by its administration. [EU]

**Signs and Symptoms:** Clinical manifestations that can be either objective when observed by a physician, or subjective when perceived by the patient. [NIH]

**Skeletal:** Having to do with the skeleton (boney part of the body). [NIH]

**Skeleton:** The framework that supports the soft tissues of vertebrate animals and protects many of their internal organs. The skeletons of vertebrates are made of bone and/or cartilage. [NIH]

**Sneezing:** Sudden, forceful, involuntary expulsion of air from the nose and mouth caused by irritation to the mucous membranes of the upper respiratory tract. [NIH]

**Soaps:** Sodium or potassium salts of long chain fatty acids. These detergent substances are obtained by boiling natural oils or fats with caustic alkali. Sodium soaps are harder and are used as topical anti-infectives and vehicles in pills and liniments; potassium soaps are soft, used as vehicles for ointments and also as topical antimicrobials. [NIH]

**Social Environment:** The aggregate of social and cultural institutions, forms, patterns, and processes that influence the life of an individual or community. [NIH]

**Sodium:** An element that is a member of the alkali group of metals. It has the atomic symbol Na, atomic number 11, and atomic weight 23. With a valence of 1, it has a strong affinity for oxygen and other nonmetallic elements. Sodium provides the chief cation of the extracellular body fluids. Its salts are the most widely used in medicine. (From Dorland, 27th ed) Physiologically the sodium ion plays a major role in blood pressure regulation, maintenance of fluid volume, and electrolyte balance. [NIH]

**Soft tissue:** Refers to muscle, fat, fibrous tissue, blood vessels, or other supporting tissue of the body. [NIH]

**Solvent:** 1. Dissolving; effecting a solution. 2. A liquid that dissolves or that is capable of dissolving; the component of a solution that is present in greater amount. [EU]

**Somatic:** 1. Pertaining to or characteristic of the soma or body. 2. Pertaining to the body wall in contrast to the viscera. [EU]

**Soybean Oil:** Oil from soybean or soybean plant. [NIH]

Specialist: In medicine, one who concentrates on 1 special branch of medical science. [NIH]

**Species:** A taxonomic category subordinate to a genus (or subgenus) and superior to a subspecies or variety, composed of individuals possessing common characters distinguishing them from other categories of individuals of the same taxonomic level. In taxonomic nomenclature, species are designated by the genus name followed by a Latin or Latinized adjective or noun. [EU]

**Specificity:** Degree of selectivity shown by an antibody with respect to the number and types of antigens with which the antibody combines, as well as with respect to the rates and the extents of these reactions. [NIH]

**Spectrum:** A charted band of wavelengths of electromagnetic vibrations obtained by refraction and diffraction. By extension, a measurable range of activity, such as the range of bacteria affected by an antibiotic (antibacterial s.) or the complete range of manifestations of a disease. [EU]

**Sperm:** The fecundating fluid of the male. [NIH]

**Spinal cord:** The main trunk or bundle of nerves running down the spine through holes in the spinal bone (the vertebrae) from the brain to the level of the lower back. [NIH]

**Spinous:** Like a spine or thorn in shape; having spines. [NIH]

**Stabilizer:** A device for maintaining constant X-ray tube voltage or current. [NIH]

**Steroid:** A group name for lipids that contain a hydrogenated cyclopentanoperhydrophenanthrene ring system. Some of the substances included in this group are progesterone, adrenocortical hormones, the gonadal hormones, cardiac aglycones, bile acids, sterols (such as cholesterol), toad poisons, saponins, and some of the carcinogenic hydrocarbons. [EU]

**Steroid therapy:** Treatment with corticosteroid drugs to reduce swelling, pain, and other symptoms of inflammation. [NIH]

**Stimulus:** That which can elicit or evoke action (response) in a muscle, nerve, gland or other excitable issue, or cause an augmenting action upon any function or metabolic process. [NIH]

**Stomach:** An organ of digestion situated in the left upper quadrant of the abdomen between the termination of the esophagus and the beginning of the duodenum. [NIH]

**Streptococcal:** Caused by infection due to any species of streptococcus. [NIH]

Streptococcus: A genus of gram-positive, coccoid bacteria whose organisms occur in pairs or chains. No endospores are produced. Many species exist as commensals or parasites on man or animals with some being highly pathogenic. A few species are saprophytes and occur in the natural environment. [NIH]

Stress: Forcibly exerted influence; pressure. Any condition or situation that causes strain or tension. Stress may be either physical or psychologic, or both. [NIH]

**Subacute:** Somewhat acute; between acute and chronic. [EU]

Subclinical: Without clinical manifestations; said of the early stage(s) of an infection or other disease or abnormality before symptoms and signs become apparent or detectable by clinical examination or laboratory tests, or of a very mild form of an infection or other disease or abnormality. [EU]

**Subcutaneous:** Beneath the skin. [NIH]

**Substance P:** An eleven-amino acid neurotransmitter that appears in both the central and peripheral nervous systems. It is involved in transmission of pain, causes rapid contractions of the gastrointestinal smooth muscle, and modulates inflammatory and immune responses. [NIH]

Sulfacetamide: An anti-infective agent that is used topically to treat skin infections and orally for urinary tract infections. [NIH]

Sulfur: An element that is a member of the chalcogen family. It has an atomic symbol S, atomic number 16, and atomic weight 32.066. It is found in the amino acids cysteine and methionine. [NIH]

**Sunburn:** An injury to the skin causing erythema, tenderness, and sometimes blistering and resulting from excessive exposure to the sun. The reaction is produced by the ultraviolet radiation in sunlight. [NIH]

Suppression: A conscious exclusion of disapproved desire contrary with repression, in which the process of exclusion is not conscious. [NIH]

**Surfactant:** A fat-containing protein in the respiratory passages which reduces the surface tension of pulmonary fluids and contributes to the elastic properties of pulmonary tissue. [NIH]

Sweat: The fluid excreted by the sweat glands. It consists of water containing sodium chloride, phosphate, urea, ammonia, and other waste products. [NIH]

Sweat Glands: Sweat-producing structures that are embedded in the dermis. Each gland consists of a single tube, a coiled body, and a superficial duct. [NIH]

**Symphysis:** A secondary cartilaginous joint. [NIH]

Symptomatic: Having to do with symptoms, which are signs of a condition or disease. [NIH]

Symptomatology: 1. That branch of medicine with treats of symptoms; the systematic discussion of symptoms. 2. The combined symptoms of a disease. [EU]

Synaptic: Pertaining to or affecting a synapse (= site of functional apposition between neurons, at which an impulse is transmitted from one neuron to another by electrical or chemical means); pertaining to synapsis (= pairing off in point-for-point association of homologous chromosomes from the male and female pronuclei during the early prophase of meiosis). [EU]

Synergistic: Acting together; enhancing the effect of another force or agent. [EU]

**Systemic:** Affecting the entire body. [NIH]

**Tacrolimus:** A macrolide isolated from the culture broth of a strain of Streptomyces tsukubaensis that has strong immunosuppressive activity in vivo and prevents the activation of T-lymphocytes in response to antigenic or mitogenic stimulation in vitro. [NIH]

**Tea Tree Oil:** Essential oil extracted from Melaleuca alternifolia (tea tree). It is used as a topical antimicrobial due to the presence of terpineol. [NIH]

**Teratogenic:** Tending to produce anomalies of formation, or teratism (= anomaly of formation or development: condition of a monster). [EU]

**Testosterone:** A hormone that promotes the development and maintenance of male sex characteristics. [NIH]

**Therapeutics:** The branch of medicine which is concerned with the treatment of diseases, palliative or curative. [NIH]

**Thermoregulation:** Heat regulation. [EU]

**Thigh:** A leg; in anatomy, any elongated process or part of a structure more or less comparable to a leg. [NIH]

**Third Ventricle:** A narrow cleft inferior to the corpus callosum, within the diencephalon, between the paired thalami. Its floor is formed by the hypothalamus, its anterior wall by the lamina terminalis, and its roof by ependyma. It communicates with the fourth ventricle by the cerebral aqueduct, and with the lateral ventricles by the interventricular foramina. [NIH]

**Thyroxine:** An amino acid of the thyroid gland which exerts a stimulating effect on thyroid metabolism. [NIH]

**Tin:** A trace element that is required in bone formation. It has the atomic symbol Sn, atomic number 50, and atomic weight 118.71. [NIH]

**Tinnitus:** Sounds that are perceived in the absence of any external noise source which may take the form of buzzing, ringing, clicking, pulsations, and other noises. Objective tinnitus refers to noises generated from within the ear or adjacent structures that can be heard by other individuals. The term subjective tinnitus is used when the sound is audible only to the affected individual. Tinnitus may occur as a manifestation of cochlear diseases; vestibulocochlear nerve diseases; intracranial hypertension; craniocerebral trauma; and other conditions. [NIH]

**Tissue:** A group or layer of cells that are alike in type and work together to perform a specific function. [NIH]

**Tolerance:** 1. The ability to endure unusually large doses of a drug or toxin. 2. Acquired drug tolerance; a decreasing response to repeated constant doses of a drug or the need for increasing doses to maintain a constant response. [EU]

**Topical:** On the surface of the body. [NIH]

**Toxic:** Having to do with poison or something harmful to the body. Toxic substances usually cause unwanted side effects. [NIH]

**Toxicity:** The quality of being poisonous, especially the degree of virulence of a toxic microbe or of a poison. [EU]

**Toxicology:** The science concerned with the detection, chemical composition, and pharmacologic action of toxic substances or poisons and the treatment and prevention of toxic manifestations. [NIH]

Toxins: Specific, characterizable, poisonous chemicals, often proteins, with specific biological properties, including immunogenicity, produced by microbes, higher plants, or animals. [NIH]

Trace element: Substance or element essential to plant or animal life, but present in extremely small amounts. [NIH]

Tractus: A part of some structure, usually that part along which something passes. [NIH]

Transfection: The uptake of naked or purified DNA into cells, usually eukaryotic. It is analogous to bacterial transformation. [NIH]

**Translation:** The process whereby the genetic information present in the linear sequence of ribonucleotides in mRNA is converted into a corresponding sequence of amino acids in a protein. It occurs on the ribosome and is unidirectional. [NIH]

**Transmitter:** A chemical substance which effects the passage of nerve impulses from one cell to the other at the synapse. [NIH]

Trauma: Any injury, wound, or shock, must frequently physical or structural shock, producing a disturbance. [NIH]

**Tremor:** Cyclical movement of a body part that can represent either a physiologic process or a manifestation of disease. Intention or action tremor, a common manifestation of cerebellar diseases, is aggravated by movement. In contrast, resting tremor is maximal when there is no attempt at voluntary movement, and occurs as a relatively frequent manifestation of Parkinson disease. [NIH]

Trichomoniasis: An infection with the protozoan parasite Trichomonas vaginalis. [NIH]

**Tryptophan:** An essential amino acid that is necessary for normal growth in infants and for nitrogen balance in adults. It is a precursor serotonin and niacin. [NIH]

**Tunica:** A rather vague term to denote the lining coat of hollow organs, tubes, or cavities. [NIH]

**Ulcer:** A localized necrotic lesion of the skin or a mucous surface. [NIH]

**Ultraviolet radiation:** Invisible rays that are part of the energy that comes from the sun. UV radiation can damage the skin and cause melanoma and other types of skin cancer. UV radiation that reaches the earth's surface is made up of two types of rays, called UVA and UVB rays. UVB rays are more likely than UVA rays to cause sunburn, but UVA rays pass deeper into the skin. Scientists have long thought that UVB radiation can cause melanoma and other types of skin cancer. They now think that UVA radiation also may add to skin damage that can lead to skin cancer and cause premature aging. For this reason, skin specialists recommend that people use sunscreens that reflect, absorb, or scatter both kinds of UV radiation. [NIH]

Umbilical Cord: The flexible structure, giving passage to the umbilical arteries and vein, which connects the embryo or fetus to the placenta. [NIH]

Umbilicus: The pit in the center of the abdominal wall marking the point where the umbilical cord entered in the fetus. [NIH]

Unconscious: Experience which was once conscious, but was subsequently rejected, as the "personal unconscious". [NIH]

Urea: A compound (CO(NH2)2), formed in the liver from ammonia produced by the deamination of amino acids. It is the principal end product of protein catabolism and constitutes about one half of the total urinary solids. [NIH]

**Urease:** An enzyme that catalyzes the conversion of urea and water to carbon dioxide and ammonia. EC 3.5.1.5. [NIH]

**Urethra:** The tube through which urine leaves the body. It empties urine from the bladder. [NIH]

**Urinary:** Having to do with urine or the organs of the body that produce and get rid of urine. [NIH]

**Urinary tract:** The organs of the body that produce and discharge urine. These include the kidneys, ureters, bladder, and urethra. [NIH]

**Urinary tract infection:** An illness caused by harmful bacteria growing in the urinary tract. [NIH]

**Urine:** Fluid containing water and waste products. Urine is made by the kidneys, stored in the bladder, and leaves the body through the urethra. [NIH]

**Urticaria:** A vascular reaction of the skin characterized by erythema and wheal formation due to localized increase of vascular permeability. The causative mechanism may be allergy, infection, or stress. [NIH]

**Uterus:** The small, hollow, pear-shaped organ in a woman's pelvis. This is the organ in which a fetus develops. Also called the womb. [NIH]

**Vaccine:** A substance or group of substances meant to cause the immune system to respond to a tumor or to microorganisms, such as bacteria or viruses. [NIH]

**Vagina:** The muscular canal extending from the uterus to the exterior of the body. Also called the birth canal. [NIH]

**Vaginal:** Of or having to do with the vagina, the birth canal. [NIH]

Vascular: Pertaining to blood vessels or indicative of a copious blood supply. [EU]

**Ventral:** 1. Pertaining to the belly or to any venter. 2. Denoting a position more toward the belly surface than some other object of reference; same as anterior in human anatomy. [EU]

**Vertebrae:** A bony unit of the segmented spinal column. [NIH]

**Vertigo:** An illusion of movement; a sensation as if the external world were revolving around the patient (objective vertigo) or as if he himself were revolving in space (subjective vertigo). The term is sometimes erroneously used to mean any form of dizziness. [EU]

**Vesicular:** 1. Composed of or relating to small, saclike bodies. 2. Pertaining to or made up of vesicles on the skin. [EU]

**Veterinary Medicine:** The medical science concerned with the prevention, diagnosis, and treatment of diseases in animals. [NIH]

**Viral:** Pertaining to, caused by, or of the nature of virus. [EU]

**Virulence:** The degree of pathogenicity within a group or species of microorganisms or viruses as indicated by case fatality rates and/or the ability of the organism to invade the tissues of the host. [NIH]

**Virus:** Submicroscopic organism that causes infectious disease. In cancer therapy, some viruses may be made into vaccines that help the body build an immune response to, and kill, tumor cells. [NIH]

**Viscosity:** A physical property of fluids that determines the internal resistance to shear forces. [EU]

**Vitreous:** Glasslike or hyaline; often used alone to designate the vitreous body of the eye (corpus vitreum). [EU]

**Vitreous Hemorrhage:** Hemorrhage into the vitreous body. [NIH]

**Vulgaris:** An affection of the skin, especially of the face, the back and the chest, due to chronic inflammation of the sebaceous glands and the hair follicles. [NIH]

Wart: A raised growth on the surface of the skin or other organ. [NIH]

**White blood cell:** A type of cell in the immune system that helps the body fight infection and disease. White blood cells include lymphocytes, granulocytes, macrophages, and others. [NIH]

**Yeasts:** A general term for single-celled rounded fungi that reproduce by budding. Brewers' and bakers' yeasts are Saccharomyces cerevisiae; therapeutic dried yeast is dried yeast. [NIH]

**Zinc Compounds:** Inorganic compounds that contain zinc as an integral part of the molecule. [NIH]

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