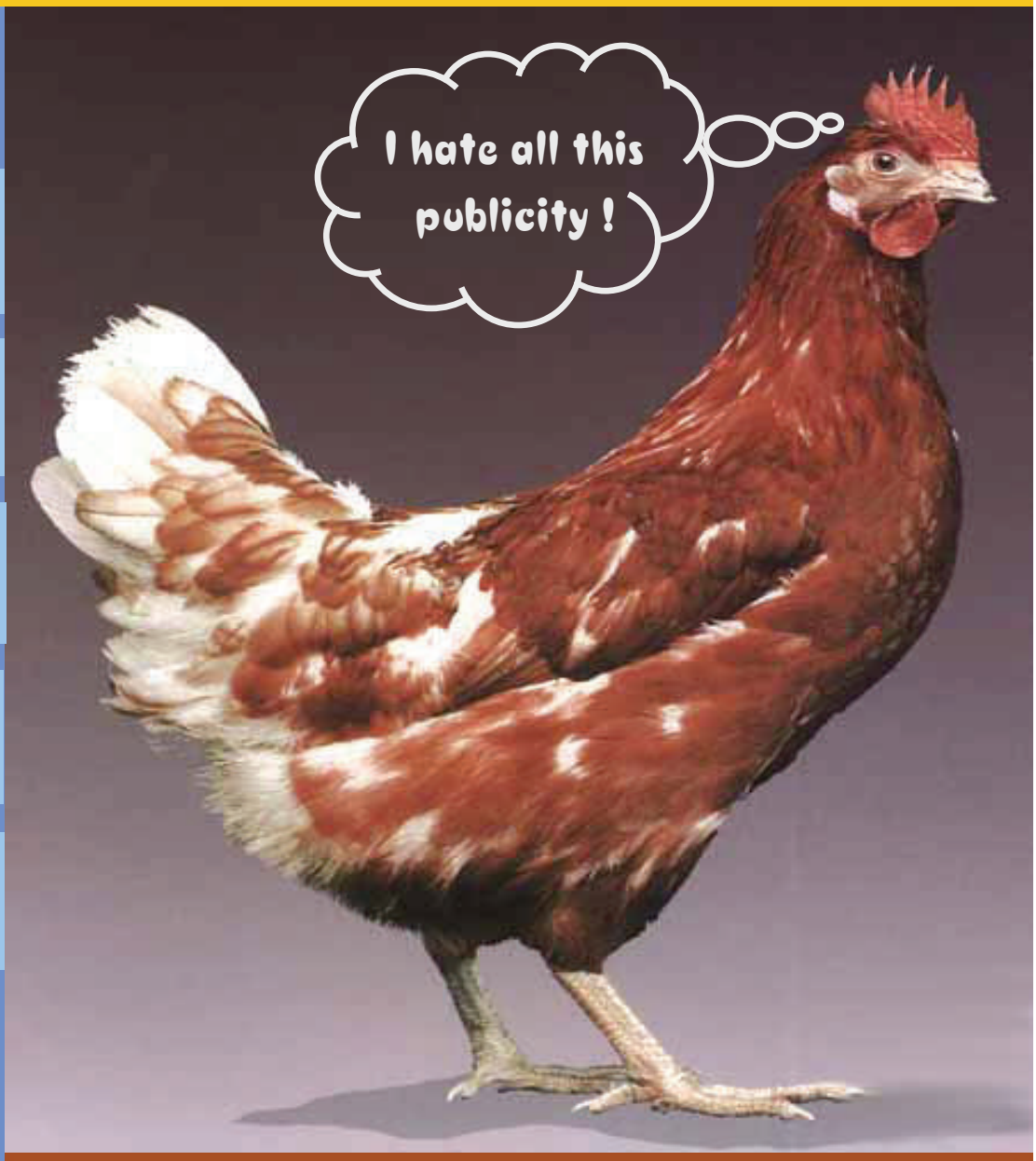
Caduceus

A Publication of the Medical Divison of the American Translators Association

Summer 2006

CONTENT: Part One



FLU

What's in a name?

Caduceus
A PUBLICATION OF THE MEDICAL DIVISION OF ATA

Summer 2006

Caduceus is a quarterly publication of the Medical Division of the American translators Association, a non-profit organization dedicated to promoting the recognition of translating and interpreting as professions.

Please mail all correspondence and contributions to:
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- Once again, we have gathered for this issue a diverse mix of topics that include our regular columns as well as new contributions from our readers.
- Flu leads the way. Always in the news, a pandemic of influenza would be a disaster of unthinkable proportions.
- "Natural" is not always synonymous with good and wholesome, as marketing forces would lead us to believe. This fallacy is carefully dissected out in our Pitfalls and Caveats section.
- The topic of Ethics is scholarly introduced for the first time in ***Caduceus*** by our guest writer Michael McCann.
- The need for State regulatory norms to deal with errant or inappropriate behavior by medical interpreters is the subject of our Interpreters at Work column.
- Our Glossarium and Bits and Pieces sections are always on the look for issues and terminology - new and old - that need clarification and/or dissemination.
- Our second medical crossword puzzle is in place. Readers are invited to submit medical word scrabbles and scrambles, puzzles, jumbles and other teasers.
- The list of old medical words mentioned on the last issue caught the attention of various readers who provided correct answers or the sources where these antiquated terms can be found. A note will follow on the next issue.

Instructions to Authors

Submissions for publications must be sent electronically in Word format. The deadline for submissions for the Fall issue of ***Caduceus*** is 15 September 2006.

Caduceus carefully reviews its content in order to eliminate any textual errors. Nevertheless, we apologize for any errors in grammar, punctuation, typography and the like which may inadvertently appear on our pages.

by Rafael A. Rivera, M.D., FACP

The worse pandemic in history

Flu - short for Influenza - is both the common viral illness we all know about, as well as the worse recorded infectious disease disaster in human history. During the influenza pandemic of 1918 - 1919 some 20 to 40 million people died as the disease circled the globe. More than in the coincidental World War I. Physicians were completely helpless. The Journal of the American Medical Association, in its final edition of 1918 (JAMA 12/28/1918) captures the unforgettable year of suffering and death: ***"The 1918 has gone: a year momentous as the termination of the most cruel war in the history of the human race (Word War I) … unfortunately a year which developed a most fatal infectious disease causing the death of hundreds of thousands of human beings. Medical science .. devoted itself to putting men on the firing line and keeping them there. Now it must turn with its whole might to combating the greatest enemy of all - infectious disease."***

The hoped-for scientific thrust towards combating infectious diseases did not materialize. Ten years later penicillin, the first antibacterial, was discovered. Further, it took another twenty years before penicillin was pharmaceutically produced for general use. By that time we had engaged in another World War. Discovery and production of antiviral medications in the 20th century has had limited scientific success in spite of sustained efforts.

Ordinary flu

At the other end of the illness spectrum what we call flu is a variable, mild to severe, contagious viral respiratory illness that most of us are familiar with. Every year in the US, on average (CDC.gov):

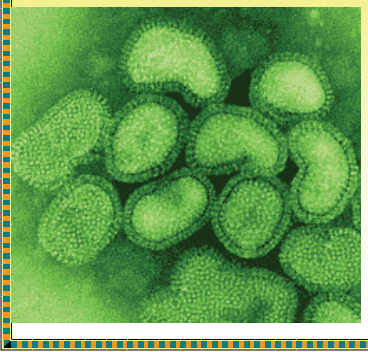
a. 5% - 20% of the population gets the flu
b. more than 200,000 people are hospitalized for complications
c. about 36,000 people die of flu. Older people, young children and people with certain health conditions are particularly vulnerable to serious complications of flu

The disease is spread by coughing and sneezing that carry the virus in droplets through the air from one person to another or by touching a surface with flu virus in it. Most healthy adults are able to infect others beginning one day prior to the development of symptoms and up to 5 days after becoming sick i.e., prior to as well as while a person is sick.

The Influenza Viruses

There are three types of influenza viruses: A, B, and C. Humans can be infected by all three types of viruses; however, the most significant impacts arise

What is a virus?



An ultramicroscopic infectious agent that replicates itself only within cells of living hosts. Viruses are 10 - 100 times smaller than bacteria. Bacteria carry all the machinery needed for cell growth and multiplication. Viruses are obligate intracellular parasitic organisms. They lack the machinery for self-reproduction, they can only reproduce by taking over other cells of the living host and turning the normal cell's genetic material from its normal function into producing the virus itself. During the characteristic rapid replication of viruses, surface changes is what gives rise to new strains.

(see p. 5)

from the A strains. Influenza A subtypes and B viruses are further classified by strains. The subtypes of type A that are currently circulating among people worldwide include H1N1, H1N2, and H3N2 viruses.

Avian Influenza

Wild birds are the natural host for all known subtypes of influenza A viruses. Typically wild birds do not become sick while carrying the virus. However domestic poultry, such as chickens and turkeys can become very sick and die. Avian influenza viruses are further classified as to high (HP) or low (LP) pathogenicity, the ability to cause disease. There are two forms of risk to humans from avian strains: direct infection or the potential for emergence of new strains as a result of avian-human recombination. A limited number of human cases associated with outbreaks in poultry has been reported since the possibility was first recognized.

A new and lethal strain - A/H5N1

Since 1977 this new and more lethal strain of HPA1 viruses - the A/H5N1 has progressively affected poultry in the Far East, Middle East, Africa and now in Europe. As of February 2006, 169 human cases with 91 deaths have been reported to the World Health Organization. What has been learned so far from the human experience with A/H5N1 cases is that: a) it is poorly adapted to human species, those infected rarely become ill, b) for those who do develop the illness it is highly pathogenic. However, H5N1 viruses are constantly evolving and mutating - scientists believe they have a pandemic potential. Whether this will ever come about is an imponderable at this time.

Is it Flu or something else?

Of greater day to day importance is whether we are dealing with flu or symptoms of something similar. There are a number of respiratory viral diseases due to rhinoviruses - the common cold being one of them - as well as allergies and local sinus infections that can mimic typical flu symptoms. A July 2006 medical article published in the New England Journal of Medicine concluded that doctors missed 72 percent to 83 percent of flu cases in children under 5. In the United Kingdom inhaled pollution may be the offending cause. Flu-stricken children are often diagnosed with asthma, bronchiolitis, pneumonia or simply viral illness.

Can humans get avian flu?

That has happened, but only sporadically. Since 1997 over 200 cases of confirmed human infection have been reported, thought to be the result of direct contact with infected poultry or contaminated surfaces. To date no sustained human-to-human transmission has occurred.

The worse scenario is one of poultry-human transmission, the creation, through genetic reassortment, of a new human influenza subtype, which causes serious human illness and is easily transmitted from person-to-person.

STRUCTURAL REPRESENTATION OF THE INFLUENZA

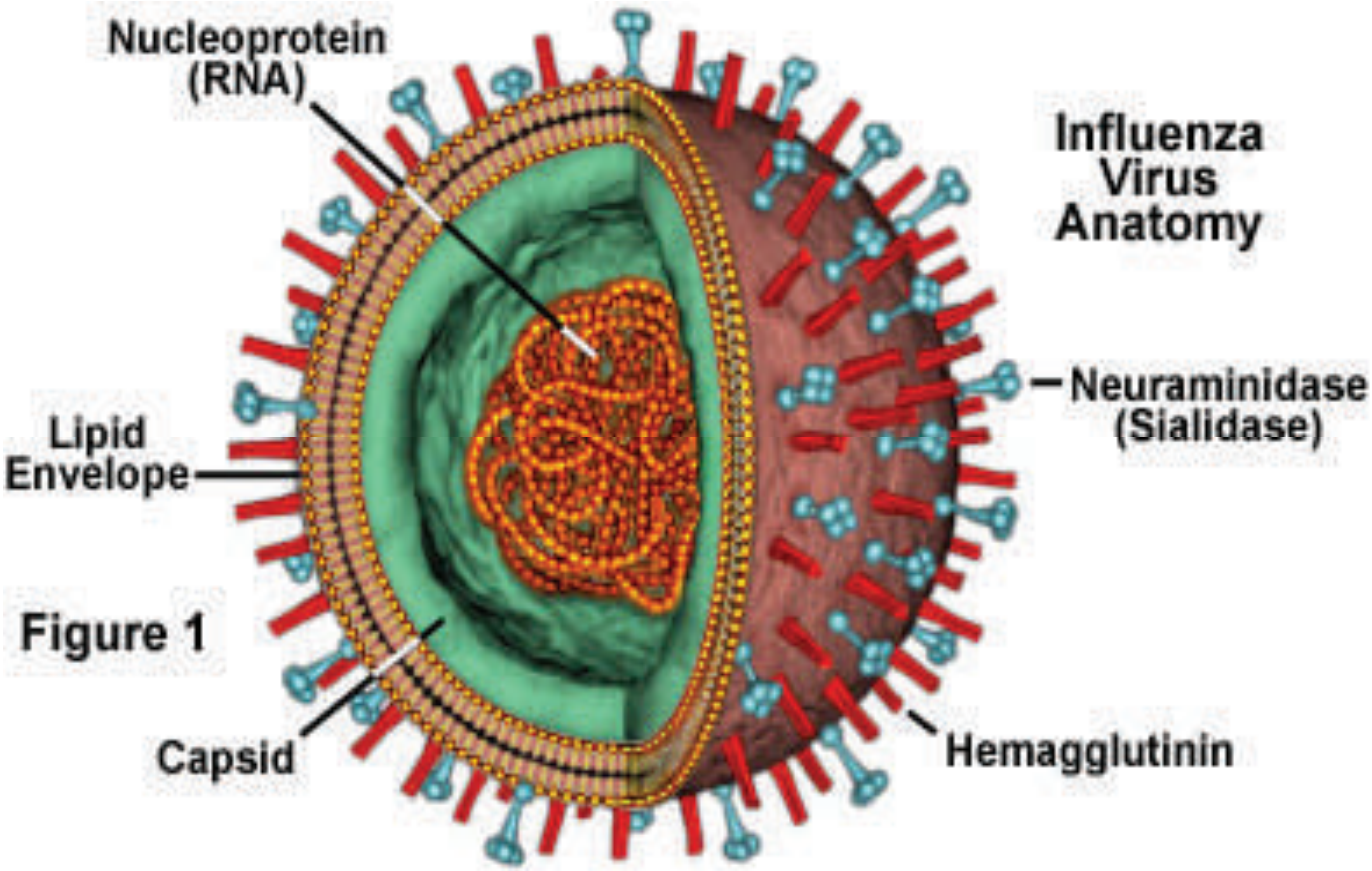
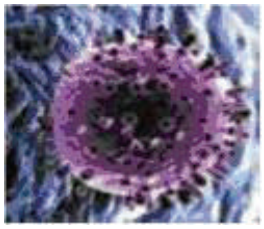
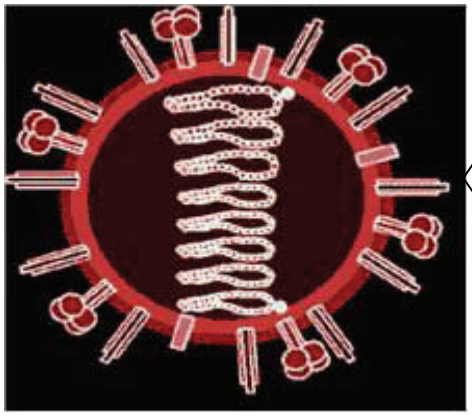


Figure 1



1. Illustration of flu virus

2. Electron microscopic view of H5N1



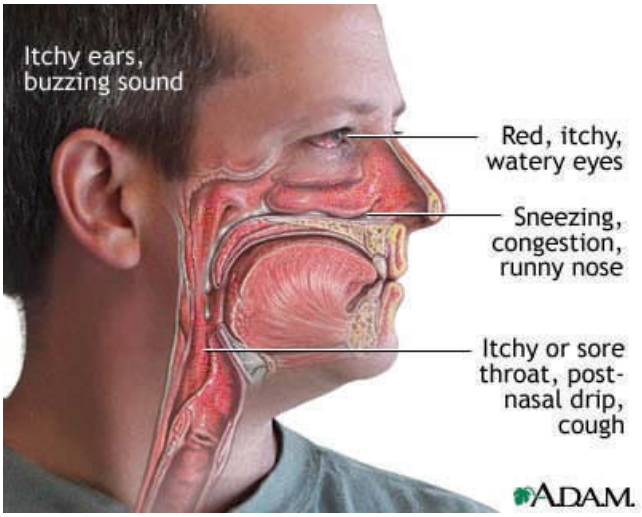
Artificial reconstruction of the 1918 Spanish Flu virus that may contain a gene responsible for the pandemic.

DIFFERENTIAL DIAGNOSIS OF FLU

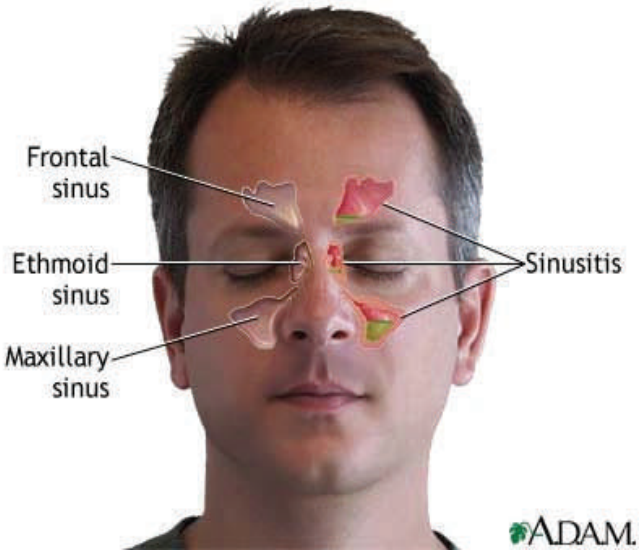
Symptom	Cold	Flu	Allergic Rhinits	Sinusitis
Congestion	Yes		Yes	
Cough	Yes	Yes		Yes
Dizziness	Yes	Yes		Yes
Sore Throat	Early	Mid	Yes	Yes
Runny Nose	Yes		Yes	Yes
Stuffy Nose	Yes		Yes	Yes
Sneezing	Yes		Yes	
Nasal Discharge	Thick / Yellow	Cloudy	Thin / Clear	Thick Yellow / Green
Duration	5—7 days	2—3 weeks	Episodic	Perpetual unless Treated
Generalized Aches and Pains		Yes, often severe		Mild
Sweating		Yes		
Extreme Exhaustion		Early /Prominent		
Fatigue / Weakness	Mild	Pronounced	Mild	Mild
Fever		High (102°—104°) Lasts 3—4 days		Low grade
Headache	Rare	Yes		Yes
Itchy Eyes / Nose/ Throat			Yes	
Seasonal Pattern	Yes	Yes (Winter)	Yes	Yes
Hoarseness	Yes			Yes
Facial Pain				Yes
Bad Breath				Yes

Reference:

Most of the information used in this article was obtained from the Center for Disease Control, US government: CDC.gov



Typical allergic rhinitis can be bothersome but it is easily recognized by allergy sufferers from the symptoms depicted in the illustration. There is usually no fever or systemic symptoms-muscle aches and pains and fatigue. Antihistamines and decongestants usually work well.



Infection within the paranasal sinuses is quite bothersome but usually localized to the sinuses. There is overlying pain and tenderness, nasal discharge can become yellowish - green.

What is a "flu-like illness?

Viral illnesses typically give rise to a characteristic cluster of symptoms we all know well. Fever, headaches, general malaise, tiredness, aches and pains, perhaps a subtle rash, but nothing that allows for a specific diagnosis. In turn, these symptoms may disappear in 48-72 hours with symptomatic treatment i.e., bed rest, analgesics, increased fluids intake and some remedies of choice. This vague but common complex has been called a flu-like illness or syndrome. No, it is not a formal diagnostic category. No, it does not appear in the International Classification of Diseases -- but it surely serves a very useful purpose in clinical medicine.

The yearly flu vaccine

Every year the flu vaccine that we get in the US is made up of a mix of the most likely viruses to attack us in the coming year as determined by the World Health Organization surveillance. Each year the prevalent influenza viruses change and different strains become dominant. Due to the mutability of particular viruses the formulation of the vaccine changes every year.

by Leon McMorrow

We are happy to report a very helpful response to the new *Do ut Des* ("I give/You give") feature introduced in the Spring 2006 issue. After all, it merely represents what we – and other medical occupations – are constantly doing in practice: sharing knowledge and findings. One of the more frightening clouds to appear over the medical world in recent years is the insidious, aggressive *hoarding of knowledge for commercial purposes*. This practice has always been the norm in industry ("proprietary knowledge") and has now become so in some branches of the service sector, such as financing and related fields, but it would undercut the millennia-old tradition of altruism in medicine. Anything we can do to promote genuine sharing of medical knowledge will, in my opinion, be beneficial for society and for us as individuals. So we thank Ray Collins, our first responder to the *Do ut Des* invitation, and present his contribution below. I have added comments where I felt further discussion would be enlightening to us all – Leon McMorrow.

Do ut Des - *Response from E. Ray Collins, Austin, Texas*

1. *Excipiens pro compresso obducto* (Latin/Italian; context: drugs): excipient for tablet coating

2. *organifizieren* (German, endocrinology): Organification in the context of endocrinology most frequently refers to iodide organification defect. In the normal course of events, iodine is bound to organic thyronine, and thus "organified" = made organic.

3. *E/A Verhältnis* (German hospital discharge report): E/A ratio is the correct translation in the context of echocardiography.

   Comment: another possibility I had in mind, but could not confirm it either way, is *Eingabe/Ausgab*e (= [fluid] intake/output – I/O) because part of the patient's condition on admission was dehydration, in addition to cardiovascular disease. The discharge summary was not specific enough about the field of reference to make any clear decision. In this case I left the *E/A* intact, with some misgivings.

4. *Abbreviations/Names for medical products regulatory agencies in France and/or Spain:*

   AFSSAPS [French] = Agence Française de Sécurité Sanitaire des Produits de Santé (acronym officially doesn't match the French title): French Health Products Safety Agency (English title from their bilingual web site).

   BECT [French] = Bureau d'Études Cliniques et Thérapeutiques (Office of Clinical and Therapeutic Studies).

   CCPPRB = [French} (Comités Consultatifs de Protection des Personnes dans la Recherche Biomédicale) Consultative Committees for the Protection of Individuals in Biomedical Research.

   DEDIM = [French} Direction de l'Évaluation des Dispositifs Médicaux (Medical Devices Evaluation Department}

   DEMEB = [French} Direction de l'Evaluation des Médicaments et Produits Biologiques (Medicinal Products and Biologics Evaluation Department, not a translation of the French title)

   DEPPCB = [French} Direction de l'Évaluation de la Publicité et des Produits Cosmétiques et Biocides (Advertising, Cosmetics and Biocides Evaluation Department – not a translation of the French title)

DLC = [French} Direction des Laboratoires et des Contrôles (Laboratories and Control Department)

JRI [Spanish] = Junta de Revisión Institucional (Institutional Review Board, IRB) [for clinical trials].

LNS [Spanish] = Laboratorio Nacional de Salud (National Laboratory of Health).

5. *Test strumentale* (Italian): I believe this refers to an instrumental examination, which is the use of any device beyond the stethoscope, sphygmomanometer, reflex hammer, thermometer, etc., used in a general physical examination.

   Comment: How does this compare with "diagnostic test" since native English-speaking medical writers do not seem to use "instrumental examination" to include *x-ray, MRI, CT, etc*., whereas non-native English writers do (as well as writers in Italian, Spanish, Russian, German, etc.)? On Google and MedLine, the users of the term "instrumental examination" seem to be non-native English writers almost exclusively, and I suspect use of a *faux ami* in these cases.

6. *Chefarzt/Oberarzt* (German)
   I generally follow Langenscheidt's medical dictionary, with *Chefarzt* = Head Physician and *Oberarzt* = Senior Physician unless I have enough context from the source document to use some of the alternatives Langenscheidt's also gives, e.g., *Chefarzt* = Medical Superintendent, *Oberarzt* = attending physician.

   Comment: all of these are British titles, insofar as I know that system. Another suggested British equivalent for *Oberarzt* is consultant. I am in the process of collecting American and British medical titles; it is not a simple task since a "job description" would be necessary to clarify differences, and these are not usually available.

   ☞ Any suggestions for *Chefarzt/Oberarzt* applicable to U.S. hospitals?

In the next issue we will look at an interesting but confusing topic for translators – tooth numbering systems: ***"Do you know your teeth – by number?"*** *Start looking now! It is "in your face."*

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by Elena Sgarbossa, M.D.

A health-related logical fallacy:
***Agrumentum ad Naturam* (appeal to nature)**

Logical fallacies are errors of reasoning that render the conclusion of an argument invalid. Fallacies of inductive reasoning account for most errors in our discourse. A common inductive fallacy is the ***appeal to nature (Argumentum ad Naturam)***. This fallacy consists of using the term "natural" as synonymous with "desirable". By the same token, anything "artificial" or "unnatural" is "undesirable". "Natural" has a positive connotation; its antonyms, a negative one.

An ***appeal to nature*** recurrent in the media is that in which a politician makes a case for the environment by calling for support to preserve natural, pristine wilderness at all costs. While the environment needs to be protected (e.g., by ecologically preserving sources of oxygen, water and food), it is also necessary for contemporary humans to find areas to live and grow food. Is their need less valid than the need to preserve wilderness? Both arguments point to the value of human survival and health; both arguments can be considered at least equally valid.

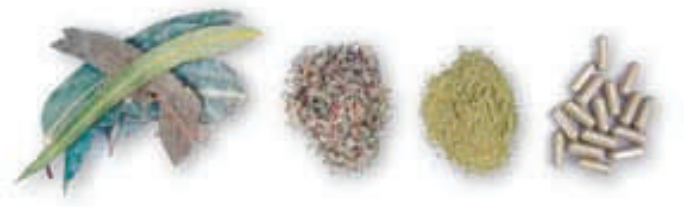
What is *"natural"?*

Defining what is "natural" is difficult. Dictionaries define *natural* as "present in or produced by nature;" "of, relating to, or concerning nature;" "conforming to the usual or ordinary course of nature," and others.

Nature, in turn, is defined as:

1. The material world and its phenomena.
2. The forces and processes that produce and control all the phenomena of the material world
3. The world of living things and the outdoors
4. A primitive state of existence, untouched and uninfluenced by civilization or artificiality.

This notion of "uninfluenced by artificiality", held as an ideal, underlies many ***appeals to nature***. Yet many things, situations or events that have been artificially influenced or that do not occur in nature are also not inherently bad. Consider activities such as using fire or wearing clothes. They are *unnatural*, yet beneficial.



The fallacy

The fallacious aspect of the ***Argumentum ad Naturam*** lies in the fact that it is used as a sweeping generalization. It presumes that *natural* equates *good / right / better / superior*. This is an extended notion regarding 'natural' products. 'Natural' products are, for many people, a first or only choice regarding food ingredients or – more worrisome - remedies to treat a number of ailments.

***Natural* products**

A *natural* product is one that derives from plant or animal sources.

"Natural" applied to edible ingredients and foods

Some natural foods such as whole grains, vegetables, and fruits are undoubtedly healthier than certain artificial foods -- such as candy. Many natural foods provide proteins that are essential for good nutrition. Some, however -- such as red meats or animal glands -- are also rich in saturated fats and cholesterol, which are harmful. Certain ice cream brands are sold in containers that read "*all natural* ice cream." One of these ice creams (which I like) lists in its label ingredients such as milk, cream, sugar, brown sugar, dutched cocoa (processed with alkali), corn syrup, egg yolks, and cinnamon extract. One serving (half a cup) of this "all-natural" ice cream provides 310 calories plus 30% of the daily value (DV) of cholesterol, plus 55% of the DV of saturated fats! Clearly, "natural" is not synonymous with "healthy".

Beef-producing cattle are sometimes fed sorghum-sudan, a plant with high nutritional value. Sorghum-sudan under certain environmental conditions can produce cyanide as prussic acid. When the plant is consumed by cattle, prussic acid is digested and breaks down into cyanide, often at toxic -or even lethal- levels.

Humans may suffer direct cyanide poisoning also by the habitual consumption of cyanide-containing foods. Cyanide is present in plants such as cassava, lima beans, clover, papaya, apple seeds and apricot kernels; other fruit pits with cyanide include those of peaches and cherries as well as bitter almonds. Bitter almonds are related to sweet almonds but are not apt for consumption. The cyanide compound isolated in fruit pits is called amygdalin (from the Greek *amugdale*, almond).

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"Natural" applied to plants, remedies and pharmaceuticals

Many botanical components have been purified and are used to manufacture useful pharmaceuticals. From the purple foxglove we have obtained digitalis. The bark of a rainforest tree called cinchona is rich in quinine; quinine has been used as a natural remedy by indigenous peoples for centuries. Quinine is (still) used as an antimalarial medication and it is also the compound from which quinidine (an antiarrhythmic drug) is biosynthesized. Botanicals and some animal products are indeed the source of an array of vitamins and dietary supplements that are indicated to treat many disorders.

Many natural ingredients are beneficial, but some are not. Star anise (*anís estrellado* in Spanish), for example, is a common home remedy among some Latino people. Star anise has been linked to vomiting, seizures, and a few deaths.

Bottled herbal medicines and dietary supplements available in the market can also pose risks. While most are advertised with a strong emphasis on their "natural" quality, their exact components are not always known or disclosed by the manufacturer. (In addition, some herbal medicines have been found to be contaminated with germs, herbicides, pesticides, and heavy metals). This is possible because natural products sold as "dietary supplements" (as well as homeopathic remedies) are exempted from FDA

regulations. If one of these products causes serious side effects or death, there is no systematic way of linking the event to the product or alerting the public.

A well-known herbal product, ginkgo biloba extract, has antioxidant effects. It also inhibits platelet aggregation, which explains the propensity to bleeding (including eye hemorrhages) among people taking it. Similarly, ginseng is advertised for its ability to strengthen normal body functions. While this is barely supported by any scientific evidence, ginseng seems to interact with blood thinners and predispose to severe bleeding.

Herbal preparations containing germander were once sold for weight control. They caused a hepatitis epidemic and had to be withdrawn. The herb kava is used as a sedative, and it has been related to numerous side effects in the central nervous system. Neurological problems have also been linked to botanicals such as valerian root and mint tea containing pennyroyal oil (menthofuran and pulegone).

Another example of undisclosed effects for a herbal mixture is that of PC-SPES (PC for prostate cancer, and SPES is Latin for "hope"). This substance has been promoted as an immunological booster for patients with prostate cancer refractory to treatment with estrogen. However, PC-SPES has substantial estrogenic activity. This, according to an article in *The New England Journal of Medicine*, was unknown to many men taking PC-SPES who were already receiving physician-prescribed estrogen therapy.

Last decade, a health store in New York sold for some time packages of bitter apricot pits (containing amygdalin). They had to be recalled because testing showed that the packages contained cyanide in doses that can be lethal to humans. Amygdalin has also been used to manufacture laetrile. Laetrile is a drug sold outside the US as an anti-cancer agent, and it is also marketed as "vitamin B-17." Laetrile has shown little anticancer effect, but its side effects include symptoms of poisoning by cyanide — a *natural* compound.

Conclusion

It is true that many artificial (or unnatural) foods are unhealthy. Synthetic drugs used in allopathic medicine can produce adverse effects –some severe. The qualifiers "unhealthy" and "inductor of adverse effects," however, are not the exclusive domain of artificial products; they often apply to products that are *natural*.

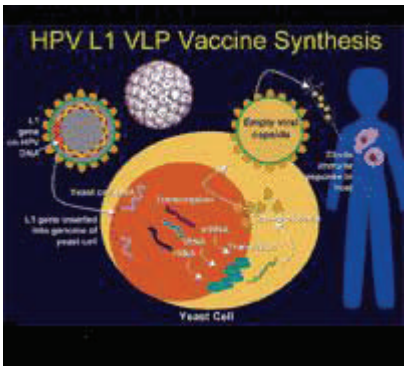
Thus, whenever you read or hear the argument (stated or implicit) that "natural = superior," consider that it may be an ***appeal to nature*** – i.e., a fallacy.

Natural is not always better, good, wholesome - or even safe.

A little bit of everything

Cervical cancer vaccine - The world's first cancer - preventing vaccine has been approved by the FDA and is expected to be on the market soon as Gardasil, a product of Merck. Cervical cancer is the leading cancer-related cause of death worldwide, killing approximately 3700 American women annually. Research shows that it can also be protective against vulvar and vaginal cancer.

How does it work? The vaccine is the realization of work that begun in 1989 targeting the sexually transmitted human papilloma virus (HPV) - the cause of most uterine cervical cancers. The acquisition of HPV occurs typically with the onset of sexual activity, so adolescents and young adults are at the highest risk for infection. Specifically, the vaccine prevents the acquisition of the HPV. It is approved for use in girls and women ages 9 to 26. It requires a series of three shots. The idea of vaccinating children against a sexually transmitted disease has already stirred some controversy in the US. Finland is planning to include the HPV vaccine as a standard childhood immunization.



Refs: CDC.gov / American Society of Clinical Oncology

What is a vaccine?

A vaccine is a pharmaceutical preparation that contains an **antigen** - a part of or the whole organism that can cause a disease - that has been killed or weakened so that said preparation can confer immunity for that particular disease to the recipient, without danger of contracting the disease.

Cough CPR - You are alone, away from the phone and start to feel like you may be having a heart attack, symptoms with which you are familiar? You may feel faint and may soon loose consciousness. What to do? It is stated in some reports circulating in the Internet that such persons can help themselves by breathing deeply and coughing repeatedly and vigorously. This is a controversial recommendation, it seems. The self-administered form of resuscitation was first described in 1976 by JM Criley, et al in JAMA, 1976; 236:1246 -1250 but, to make a long story short, there is insufficient evidence to advocate its use. Therefore, this technique is not taught in American Red Cross CPR courses and does not have the endorsement of the American Heart Association.

Birthing by Appointment - With this title Dr. Bernadine Healy, former Director of The National Institutes of Health, describes the current status of cesarean sections on demand by pregnant women.

"Cesareans are in, pushing is out", she says. World Health Organization standards declare that the rate should be no more that 15 percent. The growing experience surpasses that by a wide margin. Despite efforts by public health authorities, in 2004 the US rate reached an all time high of 29.1%. Among Brazilian educated women C-sections account for over 70% of deliveries. Reasons given are the fear of childbirth, the real possibility of injury to pelvic tissues due to overstretching such as urinary incontinence. Further, regional anesthesia, even epidurals can slow the progress of labor. Or, just simply, not wanting to go through the experience.

The realization about which there is agreement is that a C-section is a prelude to further C-sections in future pregnancies. "Once a section, always a section", says the obstetrical dictum. Inasmuch as the uterus has been weakened by a C-section scar, this increases the risk for uterine rupture in future attempts at vaginal deliveries. This argument itself has been weakened by newer surgical techniques that make such an occurrence less likely and have given rise to the acronym VBAC - vaginal birth after cesarean.

Plan B ® - using the age-old terminology for an option to the original course of action, there is now a pharmaceutical product to be used as an emergency contraceptive - "a second chance to prevent pregnancy", says the ad. The sooner you take it after sex the more effective it will be, up to 3 days with diminishing effectiveness.

http://www.go2planb.com/PDF/BCOptionsPoster.jpg - provides a visually assisted list of all available contraceptive products and surgical techniques. Plan B® is to be used immediately after unprotected sex or contraceptive failure. Plan B® is made up of levonorgestrel, a synthetic estrogen, which prevents ovulation - thus preventing fertilization (union of sperm and ovum) - and may prevent the implantation of the fertilized ovum into the wall of the uterus. Plan B® is a contraceptive, not a specific abortion-inducing pharmaceutical like RU-486.

Currently, Plan B® is only available by medical prescription. An advisory committee to the FDA suggested the release of the product for OTC - over the counter - availability, i.e., without prescription, since effectiveness is so short lived and obtaining a prescription by a healthcare professional may take longer than the known period of effectiveness. Instead the FDA decided to wait until there is supplemental information indicating that Plan B® can be used safely by women under 16 years of age without medical advise.

The answers to the old medical terminology presented in the Spring issue of Caduceus will appear in the Fall-Winter issue.

Primary Birth Control *Hormonal*	
21-day and 28-day oral contraceptive (the Pill)	
Extended-cycle oral contraceptive (the extended cycle Pill)	
Contraceptive patch	
Vaginal Ring (hormonal)	
Injection	
IUD (hormonal)	
Primary Birth Control *Non-Hormonal*	
Spermicide	
Diaphragm	
Cervical cap	
Female Condom	
Male Condom	
IUD (copper)	
Female sterilization ("tubes tied") or male sterilization (vasectomy)	
Emergency Contraceptive	
Emergency Contraceptive pill	

Refs: TearSheet-1.pdf